AMYRIS, INC. Form S-3 April 02, 2015

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Amyris, Inc. (Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

55-0856151 (IRS Employer Identification Number)

> 5885 Hollis Street, Suite 100 Emeryville, CA 94608 (510) 450-0761

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

John G. Melo
President and Chief Executive Officer
5885 Hollis Street, Suite 100
Emeryville, CA 94608
(510) 450-0761

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Please send copies of all correspondence to:

Gordon K. Davidson, Esq. Daniel J. Winnike, Esq.

Fenwick & West LLP 801 California Street Mountain View, California 94041 (650) 988-8500

From time to time after the effectiveness of this registration statement. (Approximate date of commencement of proposed sale to the public)

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or reinvestment plans, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. "

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer " Accelerated filer x

Non-accelerated filer " (Do not check if a smaller Smaller reporting company "

reporting company)

CALCULATION OF REGISTRATION FEE

Title of each class of		Proposed maximum	Proposed maximum	
securities to be	Amount to be	offering price per	aggregate offering	Amount of
registered	registered	unit	price(1)	registration fee(2)
Common Stock,				
\$0.0001 par value				
per share (3)				
Preferred Stock (4)				
Warrants (5)				
Debt securities (6)				
Units (7)				
Total			\$200,000,000	\$23,240

- (1) There are being registered an indeterminate number of securities as shall have an aggregate offering price not to exceed \$200,000,000. This registration statement shall also cover any additional securities to be offered or issued from stock splits, stock dividends, recapitalizations or similar transactions. The securities may be sold separately, together, or as units with other Securities registered under this registration statement.
- (2) The proposed maximum aggregate price has been estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act.
- (3) Subject to note (1), the securities being registered in this registration statement consist of such an indeterminate number of shares of common stock (with accompanying purchase rights, if any), as may be sold, from time to time, at indeterminate prices, by the registrant.
- (4) Subject to note (1), the securities being registered in this registration statement consist of such an indeterminate number of shares of preferred stock (with accompanying purchase rights, if any) as may be sold from time to time at indeterminate prices by the registrant. In addition, the securities being registered in this registration statement also consist of such an indeterminate number of shares of common stock (with accompanying purchase rights, if any,) (i) as may be issuable or deliverable upon conversion of shares of preferred stock, and (ii) as may be required for delivery upon conversion of shares of preferred stock as a result of anti-dilution provisions.
- (5) Subject to note (1), the securities being registered in this registration statement consist of such an indeterminate amount and number of warrants, representing rights to purchase common stock, preferred stock and debt securities registered under this registration statement as may be sold from time to time at indeterminate prices by the registrant. In addition, the securities being registered in this registration statement also consist of such an indeterminate number of shares of common stock and preferred stock (in each case, with accompanying purchase rights, if any) and debt securities (i) as may be issuable or deliverable upon exercise of warrants and (ii) as may be required for delivery upon exercise of any warrants as a result of anti-dilution provisions.
- (6) Subject to note (1), the securities being registered in this registration statement consist of such an indeterminate amount of debt securities as may be sold from time to time at indeterminate prices by the registrant. If any debt securities are issued at an original issue discount, then the offering price shall be in such greater principal amount as shall result in an aggregate initial offering price not to exceed \$200,000,000. In addition, the securities being registered in this registration statement also consist of such an indeterminate amount of common stock and preferred stock (in each case, with accompanying purchase rights, if any) (i) as may be issuable or deliverable upon the exercise or conversion of debt securities and (ii) as may be required for delivery upon exercise or conversion of debt securities as a result of anti-dilution provisions.
- (7) Subject to note (1), the securities being registered in this registration statement consist of such an indeterminate amount of units, consisting of one or more shares of common stock, shares of preferred stock, warrants, debt securities, or any combination of such securities, as may be sold from time to time at indeterminate prices by the registrant.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION DATED _______, 2015
PROSPECTUS

AMYRIS, INC.

\$200,000,000 Common Stock Preferred Stock Warrants Debt Securities Units

The securities covered by this prospectus may include shares of our common stock; shares of preferred stock; warrants to purchase shares of our common stock, preferred stock and/or debt securities; debt securities consisting of debentures, notes or other evidences of indebtedness; or units consisting of any combination of such securities. We may offer the securities from time to time in one or more series or issuances directly to our stockholders or purchasers, or through agents, underwriters or dealers as designated from time to time.

This prospectus provides a general description of the securities we may offer. Each time we sell securities, we will provide specific terms of the securities offered in a supplement to this prospectus. Such a prospectus supplement may also add, update or change information contained in this prospectus. This prospectus may not be used to consummate a sale of securities unless accompanied by the applicable prospectus supplement. We will sell these securities directly to our stockholders or to purchasers or through agents on our behalf or through underwriters or dealers as designated from time to time. If any agents or underwriters are involved in the sale of any of these securities, the applicable prospectus supplement will provide the names of the agents or underwriters and any applicable fees, commissions or discounts.

Our common stock is traded on the NASDAQ Global Select Market under the symbol "AMRS." On April 1, 2015, the closing price of our common stock was \$2.45. None of the other securities we may offer are currently traded on any securities exchange.

Investing in our securities involves risks. See "Risk Factors" commencing on page 2. You should carefully read this prospectus, the documents incorporated herein, and the applicable prospectus supplement before making any investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is April 2, 2015

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the "SEC") using a "shelf" registration process. Under this shelf registration process, from time to time, we may offer to sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of \$200,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities under this shelf registration process, we will provide a prospectus supplement that will contain specific information about the terms of such offering. The prospectus supplement may also add, update or change information contained in this prospectus. If there is any inconsistency between the information contained in this prospectus supplement. You should read both this prospectus and any applicable prospectus supplement, together with additional information described under "Where You Can Find More Information" below.

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement. This prospectus and the accompanying prospectus supplement, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and any accompanying prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus and any accompanying prospectus supplement, if any, is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus and any accompanying prospectus supplement is delivered or securities are sold on a later date.

Unless the context otherwise requires, "AMRS," "Amyris," the "Company," "we," "us," "our" and similar names refer to Amy Inc.

PROSPECTUS SUMMARY

This summary may not contain all the information that you should consider before investing in securities. You should read the entire prospectus, any applicable prospectus supplement and the information incorporated by reference in this prospectus carefully, including "Risk Factors" and the financial data and related notes and other information incorporated by reference, before making an investment decision.

Company Overview

Amyris has industrialized synthetic biology and is delivering renewable products globally into various markets ranging from consumer care to fuels. We believe industrial synthetic biology represents a third industrial revolution bringing together biology and engineering to generate new, more sustainable materials to meet the growing global demand. We have built a powerful technology platform, robust manufacturing capability, and a strong pipeline of ongoing collaborations with world-leading companies in a variety of industries. We are working to build demand for our current portfolio of products through a network of distributors and through direct sales in the cosmetics, flavors and fragrances, performance materials, and transportation fuels and lubricants markets. We are also engaged in collaborations across a variety of markets, including our current product markets and new markets, to drive additional product sales and partnership opportunities.

We were founded in 2003 in the San Francisco Bay Area by a group of scientists from the University of California, Berkeley. Our first major milestone came in 2005 when, through a grant from the Bill & Melinda Gates Foundation, we developed technology capable of creating microbial strains to produce artemisinic acid - a precursor of artemisinin, an effective anti-malarial drug. In 2008, we granted royalty-free licenses to allow Sanofi-Aventis (or Sanofi), to produce artemisinic acid using our technology. Since 2013, Sanofi has been distributing millions of artemisinin-based anti-malarial treatments incorporating this artemisinic acid. Building on our success with artemisinic acid, in 2007 we began applying our technology platform to develop, manufacture and sell sustainable alternatives to a broad range of materials.

We focused our initial development efforts primarily on the production of Biofene®, our brand of renewable farnesene, a long-chain, branched hydrocarbon molecule that we manufacture using engineered microbes in fermentation. Using farnesene as a first commercial building block molecule, we have developed a wide range of renewable products for our various target markets including cosmetics, pharmaceuticals, flavors and fragrances and fuels. Our technology platform allows us to rapidly develop microbial strains to produce other target molecules, and in 2014, we began manufacturing additional molecules for the flavors and fragrances industry.

Amyris' microbial engineering and screening technologies modify the way microorganisms process sugars in a fermentation process. We use our proprietary platform to design microbes, primarily yeast, to serve as living factories in established fermentation processes to convert plant-sourced sugars into high-value hydrocarbon molecules instead of low-value alcohol. The first two molecules we developed through this process were artemisinic acid and farnesene. In 2014, we began production of a third molecule at industrial scale and development of various other molecules in our labs. We and our partners develop products from these hydrocarbon ingredients for several target markets, including cosmetics, flavors and fragrances, performance materials, transportation fuels and lubricants. Further, in connection with our partners we have commercialized products for the cosmetics and flavors and fragrances markets.

We are able to use a wide variety of feedstocks for production, but have focused on accessing Brazilian sugarcane for our large-scale production because of its renewability, low cost and relative price stability. We have also successfully used other feedstocks such as sugar beets, corn dextrose, sweet sorghum and cellulosic sugars at our various manufacturing facilities.

Our mission is to apply inspired science to deliver sustainable solutions for a growing world. We seek to become the world's leading provider of renewable, high-performance alternatives to non-renewable chemicals and fuels. In the past, choosing a renewable product often required producers to compromise on performance or price. With our technology, leading consumer brands can develop products made from renewable sources that offer equivalent or better performance and stable supply with competitive pricing. We call this our No Compromise® value proposition. We aim to improve the world one molecule at a time by providing consumers with the best alternatives.

We have developed and are operating our company under an innovative business model that generates cash from both collaborations and from product sales margins. We believe this combination will enable us to realize our vision of becoming the world's leading renewable products company.

We were founded in 2003 and completed our initial public offering in 2010. As of January 31, 2015, we had 404 employees (including 245 in the United States and 159 in Brazil). Our corporate headquarters and pilot plant are located in Emeryville, California, and our Brazil headquarters and pilot plant are located in Campinas, Brazil. We have two operating subsidiaries, Amyris Brasil Ltda. (or Amyris Brasil) and Amyris Fuels LLC (or Amyris Fuels). Amyris Brasil oversees establishment and expansion of our production in Brazil. Amyris Fuels was originally established to help us develop fuel distribution capabilities in the United States by selling ethanol and reformulated ethanol-blended gasoline. In the third quarter of 2012, we transitioned out of the ethanol and ethanol-blended gasoline business, to focus our efforts on production and commercialization of renewable products.

Amyris, the Amyris logo, Biofene , Biossance, Dial-A-Blend, Diesel de Cana , Evoshield, μ Pharm, Myralene, Muck Daddy, Neossance and No Compromise are trademarks or registered trademarks of Amyris, Inc. This prospectus also contains trademarks and trade names of other business that are the property of their respective holders.

Our principal executive offices are located at 5885 Hollis Street, Suite 100, Emeryville, CA 94608 and our telephone number at that address is (510) 450-0761.

The Securities We May Offer

With this prospectus, we may offer shares of our common stock; shares of preferred stock; warrants to purchase shares of our common stock, preferred stock and/or debt securities; debt securities consisting of debentures, notes or other evidences of indebtedness; or units consisting of any combination of such securities. The aggregate offering price of securities that we offer with this prospectus will not exceed \$200,000,000. Each time we offer securities with this prospectus, we will provide offerees with a prospectus supplement that will contain the specific terms of the securities being offered. The following is a summary of the securities we may offer with this prospectus.

Common Stock

We may offer shares of our common stock, par value \$0.0001 per share.

Preferred Stock

We may offer shares of our preferred stock, par value \$0.0001 per share, in one or more series. Our board of directors will determine the dividend, voting, conversion and other rights of the series of shares of preferred stock being offered.

Warrants

We may offer warrants for the purchase of debt securities, shares of preferred stock or shares of common stock. Our board of directors will determine the terms of the warrants.

Debt Securities

We may offer debt securities, which may be secured or unsecured, senior or subordinated and convertible into shares of our common stock or preferred stock. Our board of directors will determine the terms of each series of debt securities being offered.

We may issue the debt securities under an indenture or indentures between us and a trustee. In this document, we have summarized general features of the debt securities from the indenture. We encourage you to read the indenture, which is an exhibit to the registration statement of which this prospectus is a part.

Units

We may issue units consisting of some or all of the securities described above, in any combination, including common stock, preferred stock, warrants and/or debt securities. The terms of these units will be set forth in a prospectus supplement. The description of the terms of these units in the related prospectus supplement will not be complete. You should refer to the applicable form of unit and unit agreement for complete information with respect to these units.

RISK FACTORS

Investing in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of securities will contain a discussion of the risks applicable to an investment in such securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading "Risk Factors" in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under the heading "Risk Factors," in our Annual Report on Form 10-K for the year ended December 31, 2014 filed with the SEC, which is incorporated herein by reference, and may be amended, supplemented, or superseded from time to time by other reports we file with the SEC in the future.

Additional risks and uncertainties beyond those set forth in our reports and not presently known to us or that we currently deem immaterial may also affect our operations. Any risks and uncertainties, whether set forth in our reports or otherwise, could cause our business, financial condition, results of operations and future prospects to be materially and adversely harmed. The trading price of our common stock could decline due to any of these risks and uncertainties, and, as a result, you may lose all or part of your investment.

FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the other documents we have filed with the SEC that are incorporated herein by reference contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. These risks and uncertainties, including those discussed under the heading "Risk Factors" above, include the possibilities of delays or failures in development, production or commercialization of products, and in our reliance on third parties to achieve our goals.

All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including any projections of financing needs, revenue, expenses, earnings or losses from operations, or other financial items; any statements of the plans, strategies and objectives of management for future operations; any statements concerning product research, development and commercialization plans and timelines; any statements regarding expected production capacities, volumes and costs; any statements regarding anticipated benefits of our products and expectations for commercial relationships; any other statements of expectation or belief; and any statements of assumptions underlying any of the foregoing. In addition, the words "believe," "anticipate," "expect," "estimate," "intend," "plan," "project," "will be," "will continue," "will result," "seek," "could," "may," "might," or any variat words or other words with similar meanings generally identify forward-looking statements.

Given these uncertainties, you should not place undue reliance on these forward-looking statements. You should read this prospectus, any supplements to this prospectus and the documents that we reference in this prospectus with the understanding that our actual future results may be materially different from what we expect.

The forward-looking statements in this prospectus and in any prospectus supplement or other document we have filed with the SEC represent our views as of the date thereof. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future or to conform these statements to actual results or revised expectations, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

RATIO OF EARNINGS TO FIXED CHARGES

The following table shows our ratio of earnings to fixed charges for the periods indicated (in thousands).

	Year Ended December 31,					
	2010	2011	2012	2013	2014	
Ratio of earnings to fixed						
charges	_	_	_	_	1.19	
Surplus/(deficiency) of						
earnings to fixed charges(1)	\$(81,870) \$(178,317) \$(204,713) \$(235,921) \$5,729	

⁽¹⁾ Earnings for the years ended December 31, 2013, 2012, 2011 and 2010 were insufficient to cover fixed charges of \$10,707, \$7,114, \$3,143, and \$2,543, respectively, for such periods. Earnings for the years ended December 31, 2014 were sufficient to cover fixed charges of \$30,735.

USE OF PROCEEDS

We will have broad discretion in the way that we use the net proceeds of any offering under this prospectus. Except as otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities covered by this prospectus for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, commercial expenditures, repayment of indebtedness, acquisitions of new technologies or businesses, and investments. The amounts that we actually spend for the purposes described above may vary significantly and will depend, in part, on the timing and amount of our future revenues, our future expenses and any potential acquisitions that we may propose. Additional information on the use of net proceeds from the sale of securities covered by this prospectus, including any specific plans for such proceeds, may be set forth in any prospectus supplement relating to the specific offering.

PLAN OF DISTRIBUTION

We may sell the securities offered through this prospectus (1) to or through underwriters or dealers, (2) directly to purchasers, including our affiliates, (3) through agents, or (4) through a combination of any of these methods. The securities may be distributed at a fixed price or prices, which may be changed, market prices prevailing at the time of sale, prices related to the prevailing market prices, or negotiated prices. The prospectus supplement will include the following information:

- the terms of the offering;
- the names of any underwriters, including any managing underwriters, dealers or agents;
 - the purchase price of the securities from us;
 - the net proceeds to us from the sale of the securities;
 - any delayed delivery arrangements;
- any underwriting discounts, commissions and other items constituting underwriters' or dealers' compensation, and any commissions paid to agents;

- any initial public offering price;
- details regarding over-allotment options under which underwriters may purchase additional securities from us, if any;
 - any discounts or concessions allowed or reallowed or paid to dealers; and

other facts material to the transaction.

Sales through Underwriters or Dealers

If underwriters are used in the sale, the underwriters will acquire the securities for their own account, including through underwriting, purchase, security lending or repurchase agreements with us. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions. Underwriters may sell the securities in order to facilitate transactions in any of our other securities (described in this prospectus or otherwise), including other public or private transactions and short sales. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise indicated in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallowed or paid to dealers. The prospectus supplement will include the names of the principal underwriters, the respective amount of securities underwritten, the nature of the obligation of the underwriters to take the securities and the nature of any material relationship between an underwriter and us.

If dealers are used in the sale of securities offered through this prospectus, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. The prospectus supplement will include the names of the dealers and the terms of the transaction.

Direct Sales and Sales through Agents

We may sell the securities offered through this prospectus directly. In this case, no underwriters or agents would be involved. Such securities may also be sold through agents designated from time to time. The prospectus supplement will name any agent involved in the offer or sale of the offered securities and will describe any commissions payable to the agent by us. Unless otherwise indicated in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. The terms of any such sales will be described in the prospectus supplement.

Delayed Delivery Contracts

If the prospectus supplement so indicates, we may authorize agents, underwriters or dealers to solicit offers from certain types of institutions to purchase securities at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the prospectus supplement. The applicable prospectus supplement will describe the commission payable for solicitation of those contracts.

Market Making, Stabilization and Other Transactions

Unless the applicable prospectus supplement states otherwise, each series of securities offered by us will be a new issue and will have no established trading market, other than our common stock, which is listed on the NASDAQ Global Select Market. We may elect to list any offered securities on an exchange. Any underwriters that we use in the sale of offered securities may make a market in such securities, but may discontinue such market making at any time without notice. Therefore, we cannot assure you that the securities will have a liquid trading market.

Any underwriter may also engage in stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Rule 104 under the Securities Exchange Act of 1934, as amended. Stabilizing transactions involve bids to purchase the underlying security in the open market for the purpose of pegging, fixing or maintaining the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

Derivative Transactions and Hedging

We, the underwriters or other agents may engage in derivative transactions involving the securities. These derivatives may consist of short sale transactions and other hedging activities. The underwriters or agents may acquire a long or short position in the securities, hold or resell securities acquired and purchase options or futures on the securities and other derivative instruments with returns linked to or related to changes in the price of the securities. In order to facilitate these derivative transactions, we may enter into security lending or repurchase agreements with the underwriters or agents. The underwriters or agents may effect the derivative transactions through sales of the securities to the public, including short sales, or by lending the securities in order to facilitate short sale transactions by others. The underwriters or agents may also use the securities purchased or borrowed from us or others (or, in the case of derivatives, securities received from us in settlement of those derivatives) to directly or indirectly settle sales of the securities or close out any related open borrowings of the securities.

General Information

Agents, underwriters, and dealers may be entitled, under agreements entered into with us, to indemnification by us against certain liabilities, including liabilities under the Securities Act.

We will bear substantially all of the costs, expenses, and fees in connection with the registration of our securities under this prospectus. The underwriters, dealers, and agents may engage in transactions with us, or perform services for us, in the ordinary course of business.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

COMMON STOCK

As of December 31, 2014, our authorized capital stock included 300,000,000 shares of common stock, par value \$0.0001 per share. A description of the material terms and provisions of our restated certificate of incorporation and restated bylaws affecting the rights of holders of our common stock is set forth below. The description is intended as a summary, and is qualified in its entirety by reference to the form of our restated certificate of incorporation and the form of our restated bylaws to that are filed as exhibits to the registration statement relating to this prospectus.

Dividend Rights

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of funds legally available if our Board of Directors, in its discretion, determines to issue dividends, and only then at the times and in the amounts that our Board of Directors may determine.

Voting Rights

Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Our restated certificate of incorporation eliminates the right of stockholders to cumulate votes for the election of directors and establishes a classified Board of Directors, divided into three classes with staggered three-year terms. Only one class of directors is elected at each annual meeting of our stockholders, with the other classes continuing in office for the remainder of their respective three-year terms.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights and is not subject to conversion, redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

Upon our dissolution, liquidation or winding-up, the assets legally available for distribution to our stockholders are distributable ratably among the holders of our common stock, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Registration Rights

Certain of our common stockholders and holders of our convertible securities exercisable for our common stock hold registration rights pursuant to (i) the Amended and Restated Investors' Rights Agreement, dated June 21, 2010, by and between us and certain of our stockholders, as amended by Amendment No. 1 to Amended and Restated Investors' Rights Agreement dated February 23, 2012, Amendment No. 2 to Amended and Restated Investors' Rights Agreement dated December 24, 2012, Amendment No. 3 to Amended and Restated Investors' Rights Agreement dated March 27, 2013, Amendment No. 4 to Amended and Restated Investors' Rights Agreement dated October 16, 2013 and Amendment No. 5 to Amended and Restated Investors' Rights Agreement dated December 24, 2013, by and between us and certain of our stockholders (as amended, the "IRA"), (ii) the Registration Rights Agreement dated February 27, 2012, by and between us and certain of our stockholders, (iii) the Registration Rights Agreement dated July 30, 2012 by and between the Company and Total Energies Nouvelles Activités USA ("Total"), (iv) the Amended and Restated Letter Agreement, dated May 8, 2014, between us and certain of our stockholders and/or (v) the Registration Rights

Agreement dated February 24, 2015 between the registrant and Nomis Bay Ltd.

The IRA provides for various registration rights, all as described below:

Piggyback Registration Rights

If we register any of our securities for public sale, the stockholders with registration rights will have the right to include their shares in the registration statement. However, this right does not apply to a registration relating to any of our employee benefit plans, the offer and sale of debt securities, or a registration on any registration form that does not include the information required for registration of the shares having piggyback registration rights. The managing underwriter of any underwritten offering will have the right to limit, due to marketing reasons, the number of shares registered by these holders to 25% of the total shares covered by the registration statement. The parties to the IRA have waived their respective piggyback rights in connection with the filing of the registration statement relating to this prospectus.

Form S-3 Registration Rights

The holders of shares having registration rights can request that we register all or a portion of their shares on Form S-3 if we are eligible to file a registration statement on Form S-3 and the aggregate price to the public of the shares offered is at least \$2,000,000. We are required to file no more than one registration statement on Form S-3 upon exercise of these rights in any 12-month period; provided, however, that the filing of the registration statement relating to this prospectus shall not count against such requirement. We may postpone the filing of a registration statement on Form S-3 for up to 90 days once in a 12-month period if we determine that the filing would be seriously detrimental to us and our stockholders.

Registration Expenses

We will pay all expenses incurred in connection with exercise of demand and piggyback registration rights, except for underwriting discounts and commissions. However, we will not pay for any expenses of any demand registration if the request is subsequently withdrawn by the holders of a majority of the shares requested to be included in such a registration statement, subject to limited exceptions. The expenses associated with exercise of Form S-3 registration rights will be borne pro rata by the holders of the shares registered on such Form S-3.

Expiration of Registration Rights

The registration rights under the IRA described above will expire after February 23, 2017.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Wells Fargo Bank, National Association.

Stock Exchange Listing

Our common stock is listed on the NASDAQ Global Select Market under the symbol "AMRS."

Anti-Takeover Provisions

See "Anti-Takeover Provisions" for a description of provisions of the Company's certificate of incorporation and bylaws and Delaware law which may have the effect of delaying, deferring or preventing changes in the Company's control.

PREFERRED STOCK

As of December 31, 2014, our authorized capital stock included 5,000,000 shares of preferred stock, par value \$0.0001 per share. We are authorized, subject to limitations prescribed by Delaware law, to issue preferred stock in

one or more series, to establish from time to time the number of shares to be included in each series and to fix the designation, powers, preferences and rights of the shares of each series and any of its qualifications, limitations or restrictions. Our Board of Directors also can increase or decrease the number of shares of any series, but not below the number of shares of that series then outstanding, without any further vote or action by our stockholders. Our Board of Directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock.

The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of our company and may adversely affect the market price of our common stock and the voting and other rights of the holders of common stock.

If we offer a specific class or series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required and applicable, this description will include:

- the number of shares offered, the liquidation preference per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate:
 - the provisions for a sinking fund, if any;
 - the provisions for redemption, if applicable;
 - any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;
 - voting rights, if any, of the preferred stock;
 - a discussion of any material U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of our company; and
- any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of our company.

The preferred stock offered by this prospectus, when issued, will not have any preemptive or similar rights.

Transfer Agent and Registrar

The transfer agent and registrar for any series or class of preferred stock will be set forth in each applicable prospectus supplement.

WARRANTS

As of December 31, 2014, we had warrants outstanding to purchase 1,021,087 shares of our common stock. We may issue warrants to purchase shares of our common stock, preferred stock and/or debt securities in one or more series

together with other securities or separately, as described in each applicable prospectus supplement. Particular terms of the warrants will be described in the applicable warrant agreements and the applicable prospectus supplement for the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
 - the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that class or series of our preferred stock;
- the exercise price for our debt securities, the amount of our debt securities to be received upon exercise, and a description of that series of debt securities;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if the warrants may not be continuously exercised throughout that period, the specific date or dates on which the warrants may be exercised;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
 - any applicable material U.S. federal income tax consequences;
- identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- the date from and after which the warrants and the common stock, preferred stock and/or debt securities will be separately transferable;
 - the minimum or maximum amount of the warrants that may be exercised at any one time;
 - any information with respect to book-entry procedures;
 - any anti-dilution provisions of the warrants;
 - any redemption or call provisions;
 - whether the warrants are to be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

DESCRIPTION OF DEBT SECURITIES

We will issue the debt securities offered by this prospectus and any accompanying prospectus supplement under an indenture to be entered into between us and the trustee identified in the applicable prospectus supplement. The terms of the debt securities will include those stated in the indenture and those made part of the indenture by reference to the Trust Indenture Act of 1939, as in effect on the date of the indenture. We have filed a copy of the form of indenture as an exhibit to the registration statement in which this prospectus is included. The indenture will be subject to and governed by the terms of the Trust Indenture Act of 1939.

We may offer under this prospectus up to an aggregate principal amount of \$200,000,000 in debt securities, or if debt securities are issued at a discount, or in a foreign currency, foreign currency units or composite currency, the principal amount as may be sold for an initial public offering price of up to \$200,000,000. Unless otherwise specified in the applicable prospectus supplement, the debt securities will represent our direct, unsecured obligations and will rank equally with all of our other unsecured indebtedness.

The following statements relating to the debt securities and the indenture are summaries, qualified in their entirety by reference to the detailed provisions of the debt securities we issue and the indenture we enter into with the trustee.

General

We may issue the debt securities in one or more series with the same or various maturities, at par, at a premium, or at a discount. We will describe the particular terms of each series of debt securities in a prospectus supplement relating to that series, which we will file with the SEC.

The prospectus supplement will set forth, to the extent required and applicable, the following terms of the debt securities in respect of which the prospectus supplement is delivered:

- the title of the series;
- the aggregate principal amount, and, if a series, the total amount authorized and the total amount outstanding;
- the issue price or prices, expressed as a percentage of the aggregate principal amount of the debt securities;
 - any limit on the aggregate principal amount;
 - the date or dates on which principal is payable;
- the interest rate or rates (which may be fixed or variable) or, if applicable, the method used to determine such rate or rates:
- the date or dates from which interest, if any, will be payable and any regular record date for the interest payable;
 - the place or places where principal and, if applicable, premium and interest, is payable;
- the terms and conditions upon which we may, or the holders may require us to, redeem or repurchase the debt securities;
- the denominations in which such debt securities may be issuable, if other than denominations of \$1,000 or any integral multiple of that number;

• whether the debt securities are to be issuable in the form of certificated securities (as described below) or global securities (as described below);

- the portion of principal amount that will be payable upon declaration of acceleration of the maturity date if other than the principal amount of the debt securities;
 - the currency of denomination;
- the designation of the currency, currencies or currency units in which payment of principal and, if applicable, premium and interest, will be made;
- if payments of principal and, if applicable, premium or interest, on the debt securities are to be made in one or more currencies or currency units other than the currency of denomination, the manner in which the exchange rate with respect to such payments will be determined;
- if amounts of principal and, if applicable, premium and interest may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index, then the manner in which such amounts will be determined;
 - the provisions, if any, relating to any collateral provided for such debt securities;
- any addition to or change in the covenants and/or the acceleration provisions described in this prospectus or in the indenture:
 - any events of default, if not otherwise described below under "Events of Default";
- the terms and conditions, if any, for conversion into or exchange for shares of our common stock or preferred stock;
 - any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents; and
- the terms and conditions, if any, upon which the debt securities shall be subordinated in right of payment to our other indebtedness.

We may issue discount debt securities that provide for an amount less than the stated principal amount to be due and payable upon acceleration of the maturity of such debt securities in accordance with the terms of the indenture. We may also issue debt securities in bearer form, with or without coupons. If we issue discount debt securities or debt securities in bearer form, we will describe material U.S. federal income tax considerations and other material special considerations which apply to these debt securities in the applicable prospectus supplement.

We may issue debt securities denominated in or payable in a foreign currency or currencies or a foreign currency unit or units. If we do, we will describe the restrictions, elections, and general tax considerations relating to the debt securities and the foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

Debt securities offered under this prospectus and any prospectus supplement will be subordinated in right of payment to certain of our outstanding senior indebtedness, including our credit facilities. In addition, we will seek the consent of the holders of any such senior indebtedness prior to issuing any debt securities under this prospectus to the extent required by the agreements evidencing such senior indebtedness.

Exchange and/or Conversion Rights

We may issue debt securities that can be exchanged for or converted into shares of our common stock or preferred stock. If we do, we will describe the terms of exchange or conversion in the prospectus supplement relating to these

debt securities.

Transfer and Exchange

We may issue debt securities that will be represented by either:

- "book-entry securities," which means that there will be one or more global securities registered in the name of a depositary or a nominee of a depositary; or
- "certificated securities," which means that they will be represented by a certificate issued in definitive registered form.

We will specify in the prospectus supplement applicable to a particular offering whether the debt securities offered will be book-entry or certificated securities.

Certificated Debt Securities

If you hold certificated debt securities, you may transfer or exchange such debt securities at the trustee's office or at the paying agent's office or agency in accordance with the terms of the indenture. You will not be charged a service charge for any transfer or exchange of certificated debt securities but may be required to pay an amount sufficient to cover any tax or other governmental charge payable in connection with such transfer or exchange.

You may effect the transfer of certificated debt securities and of the right to receive the principal of, premium, and/or interest, if any, on the certificated debt securities only by surrendering the certificate representing the certificated debt securities and having us or the trustee issue a new certificate to the new holder.

Global Securities

If we decide to issue debt securities in the form of one or more global securities, then we will register the global securities in the name of the depositary for the global securities or the nominee of the depositary, and the global securities will be delivered by the trustee to the depositary for credit to the accounts of the holders of beneficial interests in the debt securities.

The prospectus supplement will describe the specific terms of the depositary arrangement for debt securities of a series that are issued in global form. None of us, the trustee, any payment agent or the security registrar will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in a global debt security or for maintaining, supervising or reviewing any records relating to these beneficial ownership interests.

No Protection in the Event of Change of Control

The indenture does not have any covenants or other provisions providing for a put or increased interest or otherwise that would afford holders of our debt securities additional protection in the event of a recapitalization transaction, a change of control, or a highly leveraged transaction. If we offer any covenants or provisions of this type with respect to any debt securities covered by this prospectus, we will describe them in the applicable prospectus supplement.

Covenants

Unless otherwise indicated in this prospectus or the applicable prospectus supplement, our debt securities will not have the benefit of any covenants that limit or restrict our business or operations, the pledging of our assets or the incurrence by us of indebtedness. We will describe in the applicable prospectus supplement any material covenants in respect of a series of debt securities.

Consolidation, Merger and Sale of Assets

The form of indenture provides that we will not consolidate with or merge into any other person or convey, transfer, sell or lease our properties and assets substantially as an entirety to any person, unless:

- the person formed by the consolidation or into or with which we are merged or the person to which our properties and assets are conveyed, transferred, sold or leased, is a corporation organized and existing under the laws of the U.S., any state or the District of Columbia or a corporation or comparable legal entity organized under the laws of a foreign jurisdiction and, if we are not the surviving person, the surviving person has expressly assumed all of our obligations, including the payment of the principal of and, premium, if any, and interest on the debt securities and the performance of the other covenants under the indenture; and
- immediately before and immediately after giving effect to the transaction, no event of default, and no event which, after notice or lapse of time or both, would become an event of default, has occurred and is continuing under the indenture.

Events of Default

Unless otherwise specified in the applicable prospectus supplement, the following events will be events of default under the indenture with respect to debt securities of any series:

- we fail to pay any principal or premium, if any, when it becomes due;
 - we fail to pay any interest within 30 days after it becomes due;
- we fail to observe or perform any other covenant in the debt securities or the indenture for 60 days after written notice specifying the failure from the trustee or the holders of not less than 25% in aggregate principal amount of the outstanding debt securities of that series; and
- certain events involving bankruptcy, insolvency or reorganization of us or any of our significant subsidiaries.

The trustee may withhold notice to the holders of the debt securities of any series of any default, except in payment of principal of or premium, if any, or interest on the debt securities of a series, if the trustee considers it to be in the best interest of the holders of the debt securities of that series to do so.

If an event of default (other than an event of default resulting from certain events of bankruptcy, insolvency or reorganization) occurs, and is continuing, then the trustee or the holders of not less than 25% in aggregate principal amount of the outstanding debt securities of any series may accelerate the maturity of the debt securities. If this happens, the entire principal amount, plus the premium, if any, of all the outstanding debt securities of the affected series plus accrued interest to the date of acceleration will be immediately due and payable. At any time after the acceleration, but before a judgment or decree based on such acceleration is obtained by the trustee, the holders of a majority in aggregate principal amount of outstanding debt securities of such series may rescind and annul such acceleration if:

- all events of default (other than nonpayment of accelerated principal, premium or interest) have been cured or waived;
 - all lawful interest on overdue interest and overdue principal has been paid; and
 - the rescission would not conflict with any judgment or decree.

In addition, if the acceleration occurs at any time when we have outstanding indebtedness that is senior to the debt securities, the payment of the principal amount of outstanding debt securities may be subordinated in right of payment to the prior payment of any amounts due under the senior indebtedness, in which case the holders of debt securities will be entitled to payment under the terms prescribed in the instruments evidencing the senior indebtedness and the

indenture.

If an event of default resulting from certain events of bankruptcy, insolvency or reorganization occurs, the principal, premium and interest amount with respect to all of the debt securities of any series will be due and payable immediately without any declaration or other act on the part of the trustee or the holders of the debt securities of that series.

The holders of a majority in principal amount of the outstanding debt securities of a series will have the right to waive any existing default or compliance with any provision of the indenture or the debt securities of that series and to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, subject to certain limitations specified in the indenture.

No holder of any debt security of a series will have any right to institute any proceeding with respect to the indenture or for any remedy under the indenture, unless:

- the holder gives to the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the affected series make a written request and offer reasonable indemnity to the trustee to institute a proceeding as trustee;
 - the trustee fails to institute a proceeding within 60 days after such request; and
- the holders of a majority in aggregate principal amount of the outstanding debt securities of the affected series do not give the trustee a direction inconsistent with such request during such 60-day period.

These limitations do not, however, apply to a suit instituted for payment on debt securities of any series on or after the due dates expressed in the debt securities.

We will periodically deliver certificates to the trustee regarding our compliance with our obligations under the indenture.

Modification and Waiver

From time to time, we and the trustee may, without the consent of holders of the debt securities of one or more series, amend the indenture or the debt securities of one or more series, or supplement the indenture, for certain specified purposes, including:

- •to provide that the surviving entity following a change of control permitted under the indenture will assume all of our obligations under the indenture and debt securities;
 - to provide for certificated debt securities in addition to uncertificated debt securities;
 - to comply with any requirements of the SEC under the Trust Indenture Act of 1939;
- to provide for the issuance of and establish the form and terms and conditions of debt securities of any series as permitted by the indenture;
- •to cure any ambiguity, defect or inconsistency, or make any other change that does not materially and adversely affect the rights of any holder; and
 - to appoint a successor trustee under the indenture with respect to one or more series.

From time to time we and the trustee may, with the consent of holders of at least a majority in principal amount of an outstanding series of debt securities, amend or supplement the indenture or the debt securities series, or waive compliance in a particular instance by us with any provision of the indenture or the debt securities. We may not, however, without the consent of each holder affected by such action, modify or supplement the indenture or the debt securities or waive compliance with any provision of the indenture or the debt securities in order to:

- reduce the amount of debt securities whose holders must consent to an amendment, supplement, or waiver to the indenture or such debt security;
- reduce the rate of or change the time for payment of interest or reduce the amount of or postpone the date for payment of sinking fund or analogous obligations;
 - reduce the principal of or change the stated maturity of the debt securities;
 - make any debt security payable in money other than that stated in the debt security;
- change the amount or time of any payment required or reduce the premium payable upon any redemption, or change the time before which no such redemption may be made;
- waive a default in the payment of the principal of, premium, if any, or interest on the debt securities or a redemption payment;
- waive a redemption payment with respect to any debt securities or change any provision with respect to redemption of debt securities; or
- take any other action otherwise prohibited by the indenture to be taken without the consent of each holder affected by the action.

Defeasance of Debt Securities and Certain Covenants in Certain Circumstances

The indenture permits us, at any time, to elect to discharge our obligations with respect to one or more series of debt securities by following certain procedures described in the indenture. These procedures will allow us either:

- to defease and be discharged from any and all of our obligations with respect to any debt securities except for the following obligations (which discharge is referred to as "legal defeasance"):
 - 1. to register the transfer or exchange of such debt securities;
 - 2. to replace temporary or mutilated, destroyed, lost or stolen debt securities;
 - 3. to compensate and indemnify the trustee; or
 - 4. to maintain an office or agency in respect of the debt securities and to hold monies for payment in trust; or
- •to be released from our obligations with respect to the debt securities under certain covenants contained in the indenture, as well as any additional covenants which may be contained in the applicable supplemental indenture (which release is referred to as "covenant defeasance").

In order to exercise either defeasance option, we must deposit with the trustee or other qualifying trustee, in trust for that purpose:

money;

•U.S. Government Obligations (as described below) or Foreign Government Obligations (as described below) that through the scheduled payment of principal and interest in accordance with their terms will provide money; or

• a combination of money and/or U.S. Government Obligations and/or Foreign Government Obligations sufficient in the written opinion of a nationally-recognized firm of independent accountants to provide money;

that, in each case specified above, provides a sufficient amount to pay the principal of, premium, if any, and interest, if any, on the debt securities of the series, on the scheduled due dates or on a selected date of redemption in accordance with the terms of the indenture.

In addition, defeasance may be effected only if, among other things:

- in the case of either legal or covenant defeasance, we deliver to the trustee an opinion of counsel, as specified in the indenture, stating that as a result of the defeasance neither the trust nor the trustee will be required to register as an investment company under the Investment Company Act of 1940;
- •in the case of legal defeasance, we deliver to the trustee an opinion of counsel stating that we have received from, or there has been published by, the Internal Revenue Service a ruling to the effect that, or there has been a change in any applicable federal income tax law with the effect that (and the opinion shall confirm that), the holders of outstanding debt securities will not recognize income, gain or loss for U.S. federal income tax purposes solely as a result of such legal defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner, including as a result of prepayment, and at the same times as would have been the case if legal defeasance had not occurred:
- in the case of covenant defeasance, we deliver to the trustee an opinion of counsel to the effect that the holders of the outstanding debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of covenant defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if covenant defeasance had not occurred; and
 - certain other conditions described in the indenture are satisfied.

If we fail to comply with our remaining obligations under the indenture and applicable supplemental indenture after a covenant defeasance of the indenture and applicable supplemental indenture, and the debt securities are declared due and payable because of the occurrence of any undefeased event of default, the amount of money and/or U.S. Government Obligations and/or Foreign Government Obligations on deposit with the trustee could be insufficient to pay amounts due under the debt securities of the affected series at the time of acceleration. We will, however, remain liable in respect of these payments.

The term "U.S. Government Obligations" as used in the above discussion means securities that are direct obligations of or non-callable obligations guaranteed by the United States of America for the payment of which obligation or guarantee the full faith and credit of the United States of America is pledged.

The term "Foreign Government Obligations" as used in the above discussion means, with respect to debt securities of any series that are denominated in a currency other than U.S. dollars, (1) direct obligations of the government that issued or caused to be issued such currency for the payment of which obligations its full faith and credit is pledged or (2) obligations of a person controlled or supervised by or acting as an agent or instrumentality of such government the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by that government, which in either case under clauses (1) or (2), are not callable or redeemable at the option of the issuer.

Regarding the Trustee

We will identify the trustee with respect to any series of debt securities in the prospectus supplement relating to the applicable debt securities. You should note that if the trustee becomes a creditor of ours, the indenture and the Trust

Indenture Act of 1939 limit the rights of the trustee to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim, as security or otherwise. The trustee and its affiliates may engage in, and will be permitted to continue to engage in, other transactions with us and our affiliates. If, however, the trustee acquires any "conflicting interest" within the meaning of the Trust Indenture Act of 1939, it must eliminate such conflict or resign.

The holders of a majority in principal amount of the then outstanding debt securities of any series may direct the time, method and place of conducting any proceeding for exercising any remedy available to the trustee. If an event of default occurs and is continuing, the trustee, in the exercise of its rights and powers, must use the degree of care and skill of a prudent person in the conduct of his or her own affairs. Subject to that provision, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request of any of the holders of the debt securities, unless they have offered to the trustee reasonable indemnity or security.

DESCRIPTION OF UNITS

We may issue units consisting of some or all of the securities described above, in any combination, including common stock, preferred stock, warrants and/or debt securities. The terms of these units will be set forth in a prospectus supplement. The description of the terms of these units in the related prospectus supplement will not be complete. You should refer to the applicable form of unit and unit agreement for complete information with respect to these units.

ANTI-TAKEOVER PROVISIONS

The provisions of Delaware law, our restated certificate of incorporation and our restated bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of our company.

Delaware Law

Section 203 of the Delaware General Corporation Law prevents some Delaware corporations from engaging, under some circumstances, in a business combination, which includes a merger or sale of at least 10% of the corporation's assets with any interested stockholder, meaning a stockholder who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of the corporation's outstanding voting stock, unless:

- the transaction is approved by the Board of Directors prior to the time that the interested stockholder became an interested stockholder;
- •upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- •at or subsequent to such time that the stockholder became an interested stockholder the business combination is approved by the Board of Directors and authorized at an annual or special meeting of stockholders by at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

If Section 203 applied to us, the restrictions could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, could discourage attempts to acquire us.

A Delaware corporation may "opt out" of the restrictions on business combinations contained in Section 203 with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. We have agreed to opt out of Section 203 through our certificate of incorporation, but our certificate of incorporation contains substantially similar protections to our company and stockholders as those afforded under Section 203, except that we have agreed with Total that it and its affiliates will not be deemed to be "interested stockholders" under such protections.

Restated Certificate of Incorporation and Restated Bylaw Provisions

Our restated certificate of incorporation and our restated bylaws include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control of our management team, including the following:

- •Board of Directors Vacancies. Our restated certificate of incorporation and restated bylaws authorize only our Board of Directors to fill vacant directorships. In addition, the number of directors constituting our Board of Directors will be set only by resolution adopted by a majority vote of our entire Board of Directors. These provisions prevent a stockholder from increasing the size of our Board of Directors and gaining control of our Board of Directors by filling the resulting vacancies with its own nominees.
- Classified Board. Our restated certificate of incorporation and restated bylaws provide that our Board of Directors is classified into three classes of directors. The existence of a classified board could delay a successful tender offeror from obtaining majority control of our Board of Directors, and the prospect of that delay might deter a

potential offeror. Pursuant to Delaware law, the directors of a corporation having a classified board may be removed by the stockholders only for cause. In addition, stockholders will not be permitted to cumulate their votes for the election of directors.

- Stockholder Action; Special Meeting of Stockholders. Our restated certificate of incorporation provides that our stockholders may not take action by written consent, but may only take action at annual or special meetings of our stockholders. Our restated bylaws further provide that special meetings of our stockholders may be called only by a majority of our Board of Directors, the chairman of our Board of Directors, our chief executive officer or our president.
- Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at our annual meeting of stockholders. Our restated bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders.
- Issuance of Undesignated Preferred Stock. Under our restated certificate of incorporation, our Board of Directors has the authority, without further action by the stockholders, to issue up to 5,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by the Board of Directors. The existence of authorized but unissued shares of preferred stock enables our Board of Directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

In addition, we have an agreement with Total that, so long as Total holds at least 10% of our voting securities, we are required to notify Total if our Board of Directors seeks to cause the sale of the company or if we receive an offer to acquire us. In the event of such decision or offer, we are required to provide Total with all information given to an offering party and provide Total with an exclusive negotiating period of 15 business days in the event the Board of Directors authorizes us to solicit offers to buy our company, or five business days in the event that we receive an unsolicited offer to purchase us. These rights of Total may have the effect of delaying, deferring or discouraging another person from acquiring our company.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Fenwick & West LLP, Mountain View, California. The validity of any securities will be passed upon for any underwriters or agents by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2014 have been so incorporated in reliance on the reports of PricewaterhouseCoopers LLP and Pannell Kerr Forster of Texas, P.C., each an independent registered public accounting firm, given on the authority of each said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the filing requirements of the Securities Exchange Act of 1934, as amended. Therefore, we file periodic reports, proxy statements and other information with the SEC. Such reports, proxy statements and other information may be obtained by visiting the Public Reference Room of the SEC at 100 F Street, NE, Washington, D.C. 20549. You may obtain information regarding the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically.

We make our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to such reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 available free of charge through a link on the Investors section of our website located at www.amyris.com (under "Financial Information—SEC Filings") as soon as reasonably practicable after they are filed with or furnished to the SEC.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede information in this prospectus. We incorporate by reference into this prospectus the documents listed below and any future filings made by us with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than those documents or the portions of those documents furnished pursuant to Items 2.02 or 7.01 of any Current Report on Form 8-K filed under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act) until we terminate this offering, including all filings made after the date of the initial registration statement and prior to the effectiveness of the registration statement. We hereby incorporate by reference the following documents:

- our Annual Report on Form 10-K for the year ended December 31, 2014 filed with the SEC on March 31, 2015;
- our Current Reports on Form 8-K filed on January 15, 2015, January 29, 2015 and February 26, 2015 (two filed on such date); and
- the description of our common stock contained in our registration statement on Form 8-A filed April 16, 2010, under the Securities Act, including any amendment or report filed for the purpose of updating such description.

We will provide to each person, including any beneficial holder, to whom a prospectus is delivered, at no cost, upon written or oral request, a copy of any or all information that has been incorporated by reference in this prospectus but not delivered with this prospectus. You may request a copy of these filings by writing or telephoning us at the following address and number:

Amyris, Inc. 5885 Hollis Street, Suite 100 Emeryville, CA 94608 Attn. Investor Relations Phone: +1 (510) 740-7481

Copies of these filings are also available free of charge through a link on the Investors section of our website located at www.amyris.com (under "Financial Information—SEC Filings") as soon as reasonably practicable after they are filed with the SEC. The information contained on our website is not a part of this prospectus.

PROSPECTUS

AMYRIS, INC.

\$200,000,000 Common Stock Preferred Stock Warrants Debt Securities Units

April 2, 2015

We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained in this prospectus. You must not rely on any unauthorized information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not offer to sell any shares in any jurisdiction where it is unlawful. Neither the delivery of this prospectus, nor any sale made hereunder, shall create any implication that the information in this prospectus is correct after the date hereof.

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth all expenses to be paid by the registrant, other than estimated underwriting discounts and commissions, in connection with this offering. All amounts shown are estimates except for the SEC registration fee, the FINRA filing fee and The NASDAQ Stock Market listing fee:

SEC registration fee	\$23,240	
FINRA filing fee		*
The NASDAQ Stock Market listing fee		*
Printing and engraving		*
Legal fees and expenses		*
Accounting fees and expenses		*
Transfer agent and registrar fees		*
Director and officer insurance		*
Miscellaneous		*
Total	\$	*

^{*} Estimated expenses not presently known

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's Board of Directors to grant, indemnity to directors and officers under certain circumstances and subject to certain limitations. The terms of Section 145 of the Delaware General Corporation Law are sufficiently broad to permit indemnification under certain circumstances for liabilities, including reimbursement of expenses incurred, arising under the Securities Act of 1933, as amended.

As permitted by the Delaware General Corporation Law, the registrant's restated certificate of incorporation contains provisions that eliminate the personal liability of its directors for monetary damages for any breach of fiduciary duties as a director, except liability for the following:

- any breach of the director's duty of loyalty to the registrant or its stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- •under Section 174 of the Delaware General Corporation Law (regarding unlawful dividends and stock purchases); or
 - any transaction from which the director derived an improper personal benefit.

As permitted by the Delaware General Corporation Law, the registrant's restated bylaws provide that:

- the registrant is required to indemnify its directors and executive officers to the fullest extent permitted by the Delaware General Corporation Law, subject to very limited exceptions;
- the registrant may indemnify its other employees and agents as set forth in the Delaware General Corporation Law;

- the registrant is required to advance expenses, as incurred, to its directors and executive officers in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to very limited exceptions; and
 - the rights conferred in the bylaws are not exclusive.

In addition, the registrant has entered into indemnity agreements with each of its current directors and executive officers to provide them with additional contractual assurances regarding the scope of the indemnification set forth in the registrant's restated certificate of incorporation and restated bylaws and to provide additional procedural protections. The indemnification provisions in the registrant's restated certificate of incorporation and restated bylaws and the indemnification agreements entered into between the registrant and each of its directors and executive officers may be sufficiently broad to permit indemnification of the registrant's directors and executive officers for liabilities arising under the Securities Act of 1933, as amended.

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The registrant currently carries liability insurance for its directors and officers.

One of the registrant's directors (Mr. Doerr) is also indemnified by his employer with regard to his service on the registrant's Board of Directors.

Reference is made to the following documents filed as exhibits to this registration statement regarding relevant indemnification provisions described above and elsewhere herein:

Exhibit	
Number	Description
3.01	Restated Certificate of Incorporation
3.03	Restated Bylaws
4.08	Letter Agreement re: Registration Rights
4.09	Registration Rights Agreement
4.10	Registration Rights Agreement
4.11	Amended and Restated Investors' Rights Agreement
4.12	Amendment No. 1 to Amended and Restated Investors' Rights Agreement
4.13	Amendment No. 2 to Amended and Restated Investors' Rights Agreement
4.14	Amendment No. 3 to Amended and Restated Investors' Rights Agreement
4.15	Amendment No. 4 to Amended and Restated Investors' Rights Agreement
4.16	Amendment No. 5 to Amended and Restated Investors' Rights Agreement

ITEM 16. EXHIBITS

Please see the Exhibit Index beginning on page II-7 of this registration statement.

ITEM 17. UNDERTAKINGS

- (a) The undersigned registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided, however, that the undertakings set forth in paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the

Securities Exchange Act of 1934 that are incorporated by reference in the registration statements or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933, as amended, to any purchaser:
- (i) If the registrant is relying on Rule 430B:
- (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in this registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or a prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of this registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in this registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or
- (ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser: (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424; (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant; (iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d)

of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) The undersigned registrant hereby undertakes that: (i) for purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of the registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of the registration statement as of the time it was declared effective; and (ii) for the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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- (d) If and when applicable, the undersigned registrant, hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Act.
- (e) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Emeryville, State of California, on April 2, 2015.

AMYRIS, INC.

/s/ JOHN G. MELO
John G. Melo
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints John G. Melo, Raffi Asadorian and Nicholas Khadder, and each of them, as his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments or any abbreviated registration statement and any amendments thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JOHN G. Melo	Director, President and Chief Executive Officer	April 1, 2015
John G. Melo	(Principal Executive Officer)	
/s/ Raffi Asadorian Raffi Asadorian	Chief Financial Officer (Principal Financial Officer)	April 1, 2015
/s/ Karen Weaver Karen Weaver	Vice President, Finance (Principal Accounting Officer)	April 1, 2015
/s/ PHILIPPE BOISSEAU Philippe Boisseau	Director	April 1, 2015
/s/ Nam-Hai Chua Nam-Hai Chua, Ph.D.	Director	March 24, 2015
/s/ JOHN DOERR John Doerr	Director	April 1, 2015

/s/ Geoffrey Duyk Geoffrey Duyk, M.D., Ph.D.	Director	March 25, 2015
/s/ CAROLE PIWNICA Carole Piwnica	Director	April 1, 2015
/s/ FERNANDO REINACH Fernando Reinach, Ph.D.	Director	March 23, 2015
HH Sheikh Abdullah bin Khalifa Al Thani	Director	

Signature	Title	Date
/s/ R. NEIL Williams R. Neil Williams	Director	April 1, 2015
/s/ Patrick Yang Patrick Yang, Ph.D.	Director	April 1, 2015

EXHIBIT INDEX

	Description Underwriting Agreement	Form	Previously File No. F	y Filed iling Date	Exhibit	Filed Herewith
	Restated Certificate of Incorporation	10-Q	001-34885 No	ovember 10, 2010	3.01	
3.02	Certificate of Amendment dated May 12, 2014of the Restated Certificate of Incorporation	10-Q	001-34887 Aug		3.02	
3.03	Restated Bylaws	10-Q	001-34885 No	ovember 10, 2010	3.02	
	Specimen of Common Stock Certificate	S-1	333-166135 Ju	ıly 6, 2010	4.01	
	Specimen of Preferred Stock Certificate					*
4.03	Form of Common Stock Warrant Agreement and Warrant Certificate					*
4.04	Form of Preferred Stock Warrant Agreement and Warrant Certificate					*
4.05	Form of Debt Securities Warrant Agreement and Warrant Certificate					*
4.06	Form of Indenture					X
	Indenture dated May 29, 2014 between registrant and Wells Fargo Bank, National Association, as Trustee	8-K	001-34885 Ma	ay 29, 2014	4.01	
4.08	Amended and Restated Letter Agreement re: Certain Registration Rights dated May 8, 2014 between registrant and the purchasers listed therein	10-Q	001-34885 Aug	gust 8, 2014	4.01	
4.09	Registration Rights Agreement dated July 30, 2012 between registrant and Total	10-Q	001-34885 No	ovember 4, 2013	4.03	
4.10	Registration Rights Agreement dated February 27, 2012 between the registrant and registrant's security holders listed therein	S-3	333-180005 Ma	arch 9, 2012	4.04	
4.11	Amended and Restated Investors' Rights Agreement dated June 21, 2010 among registrant and registrant's security holders listed therein	S-1	333-166135 Jui	ne 23, 2010	4.02	
4.12	Amendment No. 1 to Amended and Restated Investors' Rights Agreement dated February 23, 2012 among registrant and registrant's security holders listed therein	S-3	333-180005 Ma	arch 9, 2012	4.06	
4.13	Amendment No. 2 to Amended and Restated Investors' Rights Agreement dated December 24, 2012 among registrant and registrant's security holders listed therein	10-K	001-34885 N	March 28, 2013	4.04	
4.14	Amendment No. 3 to Amended and Restated Investors' Rights Agreement dated March 27, 2013 among registrant and registrant's security holders listed therein	10-Q	001-34885 Ju	ne 9, 2013	4.02	
4.15	Amendment No. 4 to Amended and Restated Investors' Rights Agreement dated October 16,	10-K	001-34885 A _I	oril 2, 2014	4.06	

	2013 among registrant and registrant's security					
	holders listed therein					
4.16	Amendment No. 5 to Amended and Restated	10-K	001-34885	April 2, 2014	4.07	
	Investors' Rights Agreement dated December 24,					
	2013 among registrant and registrant's security					
	holders listed therein					
4.17	Side Letter dated June 21, 2010 between	S-1	333-166135	June 23, 2010	4.19	
	registrant and Total Gas & Power USA, SAS					
4.18	Registration Rights Agreement dated February	8-K	001-34885	February 26,	4.01	
	24, 2015 between the registrant and Nomis Bay			2015		
	Ltd					
5.01	Opinion of Fenwick & West LLP regarding the					X
	Securities					
12.1	Statement of Computation of Ratio of Earnings					X
	to Fixed Charges					
23.01	Consent of Fenwick & West LLP (included in					X
	Exhibit 5.01)					
23.02	Consent of PricewaterhouseCoopers LLP					X
23.03	Consent of Pannell Kerr Forster of Texas, P.C.					
24.01	Power of attorney (included on the signature					X
	page)					
25.01	Statement of Eligibility of Trustee Under Debt					**
	Indenture					

^{*} To be filed, if necessary, subsequent to the effectiveness of this registration statement by an amendment to this registration statement or incorporated by reference pursuant to a Current Report on Form 8-K in connection with the offering of securities.

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^{**} To be filed separately pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939.