FTC Requires International Industrial Gas Suppliers Praxair, Inc. and Linde AG to Divest Assets in Nine Industrial Gas Markets as a Condition of Merger

Divestiture buyers set to include Messer Group GmbH and Matheson Tri-Gas, Inc.

FOR RELEASE
October 22, 2018
TAGS:

- Chemicals & Industrial Gases
- Bureau of Competition
- Competition
- Merger
- Horizontal

The Federal Trade Commission will require industrial gas suppliers Praxair, Inc. and Linde AG to divest assets in nine industrial gases product markets in numerous geographic markets in the United States, as part of a settlement that resolves charges that their proposed $80 billion merger likely would be anticompetitive.

The products at issue

The complaint alleges that the proposed merger would harm competition in markets for bulk liquid oxygen, bulk liquid nitrogen, bulk liquid argon, bulk liquid carbon dioxide, bulk liquid hydrogen, bulk refined helium, on-site hydrogen, on-site carbon monoxide, and excimer laser gases.

Headquartered in Danbury, Conn., Praxair is the world's third-largest industrial gas supplier by revenue. Based in Munich,Germany, Linde is the second-largest global industrial gas supplier. The merger would create the largest industrial gas company in the world.

The consumer harm from the companies' proposed transaction

According to the complaint, the proposed merger would eliminate direct competition between Praxair and Linde in each of nine industrial gases product markets, leaving limited alternative sources of supply in these markets. The proposed merger would enable the merged firm to exercise market power unilaterally because, for many customers, the merging firms are their two best alternatives. As a result, purchasers of the industrial gases at issue likely would pay higher prices.

The proposed merger would also make collusion or coordinated action among the remaining firms more likely, because it would meaningfully reduce the number of firms that compete in these markets. Coordination or collusion among industrial gas suppliers would be facilitated by the homogenous nature of the products and the availability of detailed market information. In such conditions, it would be easier for the few remaining competitors to agree on a coordinated scheme and detect and punish deviations from it.

The competition concerns and economic implications

Bulk liquid oxygen, bulk liquid nitrogen and bulk liquid argon. Known as "atmospheric gases," these products are critical inputs in a number of industries, including oil and gas, steelmaking, health care, and food manufacturing. For most applications, bulk liquid oxygen, nitrogen and argon have no viable substitutes. Bulk customers do not have enough volume to justify on-site production, and their requirements are too great for packaged gas delivery. As explained in the accompanying analysis to aid public comment, the markets for bulk liquid oxygen and nitrogen are local in nature due to the high cost of transportation relative to the value of the products, while the market for bulk liquid argon—a much more expensive product—is national. The combination of Linde and Praxair would reduce competition substantially in seventeen distinct bulk liquid oxygen and nitrogen geographic markets in the United States and in the national market for bulk liquid argon. Entry into these markets is costly, difficult, and unlikely to avert the anticompetitive effects of the merger.

Bulk liquid carbon dioxide is most commonly used in the food and beverage industry to carbonate beverages and chill or freeze food. Customers would be unlikely to substitute other products in the event bulk liquid carbon dioxide prices were to increase. The geographic markets for bulk liquid carbon dioxide are regional, and the merger raises competitive concerns for this product in nine separate geographic regions of the country. Entry impediments include both the cost and time associated with building a plant and the difficulty of securing access to raw carbon dioxide sources, making entry unlikely to deter or counteract the adverse competitive effects of the proposed merger.

Bulk liquid hydrogen is used as a propellant for rockets and space vehicles, in hydrogenation and clean energy storage, and as an active ingredient in chemical manufacturing processes. Because of the high value of this product, the market for bulk liquid hydrogen is national. The proposed merger would remove one of the few bulk liquid hydrogen suppliers from the market. New entry would not reverse the likely anticompetitive effect of the merger because it takes years to accomplish and is unlikely to occur.

Bulk refined helium has specific properties that make it uniquely suited for cooling in medical applications such as magnetic resonance imaging, as a shielding gas in welding, and as a lift agent. Helium is a rare and expensive gas, and suppliers transport it from sources to customers worldwide. Linde and Praxair are two of the largest helium suppliers in the world, and together they would control two-fifths of the global helium supply. New entry is unlikely to de-concentrate the market in the foreseeable future because sources of crude helium are controlled by market incumbents through long term-contracts. Moreover, new entry requires a local delivery infrastructure that can be time-consuming and costly to develop.

Excimer laser gases,which are mixtures of neon, halogen gases, and other rare gases, are used in the semiconductor industry to produce computer chips and liquid crystal displays, and in medical applications to perform laser vision correction surgery. There is no substitute for these precisely calibrated mixtures, and Praxair and Linde are two of only four U.S. suppliers of excimer laser gases. Entry in the manufacturing of excimer laser gases is difficult because of the challenges in securing reliable sources of neon, as well as the cost and time needed to create a facility to blend the gases and to meet customers' strict certification requirements.

On-site hydrogen and on-site carbon monoxide, or "HyCO." HyCO is the industry term for on-site provision of hydrogen gas and carbon monoxide gas used by oil and petrochemical companies. Hydrogen and carbon monoxide are produced via the same chemical process, but hydrogen customers are able to recycle co-produced carbon monoxide to power the plant, whereas customers that require carbon monoxide sell off the excess hydrogen to improve their plant economics. In the Gulf Coast region, industrial gas companies need their HyCO plants near hydrogen pipelines to be viable competitors. Linde has only a small pipeline in the Gulf Coast region, and it is only able to compete in on-site hydrogen and carbon monoxide supply in a relatively small area near Houston, Texas. Other suppliers, particularly Praxair and Air Products, have extensive hydrogen pipelines in the Gulf Coast region. Outside the Gulf Coast region, Linde is a strong competitor in on-site hydrogen supply, as is Air Liquide. The proposed merger would reduce the number of significant suppliers of HyCO in the U.S. from four to three. New entry is exceedingly difficult, as the development and operation of HyCO plants demand highly specialized engineering expertise, and customers are reluctant to consider untested suppliers due to the critical nature of this input to their operations.

The settlement preserving competition

The terms of the settlement require the following divestitures:

- The parties will divest to Messer Group GmbH, or an alternative Commission-approved buyer, Linde's U.S. bulk liquid oxygen, nitrogen, and argon business, including all thirty-two of its merchant air separation units, together with sixteen of Linde's U.S. carbon dioxide facilities, source contracts equal to all of Praxair's helium source contract volume (less the volumes ordered divested to other companies by the European Commission and China), Linde's U.S. excimer laser gas business, and Linde's North American liquid hydrogen production facility, along with all related equipment, intellectual property, contracts, and other assets. Messer will form a joint venture with CVC Capital Partners to finance its acquisition of the divested assets. Messer will maintain majority control of the joint venture.
- The parties will divest to Matheson Tri-Gas, Inc., or an alternative Commission-approved buyer, five of Linde's HyCO facilities outside the Gulf Coast region, along with Linde's hydrogen pipeline in the Gulf Coast, intellectual property, customer contracts, and other assets.
- The parties will also divest two of Linde's HyCO plants back to their respective customers or to other Commission-approved buyers. The parties will divest Linde's Clear Lake, Texas plant to Celanese Corporation and Linde's La Porte, Texas plant to LyondellBasell Industries N.V., or to other Commission-approved buyers.

Praxair and Linde have agreed to divest the required facilities within four months of signing the Agreement Containing Consent Orders. Until the divestitures to Messer and Matheson are

accomplished, Linde and Praxair are prohibited from integrating their operations anywhere in the world.

Commission staff and the staff of antitrust agencies in Argentina, Brazil, Canada, Chile, China, Colombia, the European Union, Korea, and Mexico worked cooperatively to analyze the proposed transaction and potential remedies.

The Commission vote to issue the complaint and accept the proposed consent order for public comment was 4-1, with Commissioner Rohit Chopra voting no and issuing a dissenting statement.

The FTC will publish the consent package in the Federal Register shortly. The agreement will be subject to public comment for 30 days, beginning today and continuing through Nov. 21, 2018, after which the Commission will decide whether to make the proposed consent order final. Comments can be filed electronically or in paper form by following the instructions in the "Supplementary Information" section of the Federal Register notice.

NOTE: The Commission issues an administrative complaint when it has "reason to believe" that the law has been or is being violated, and it appears to the Commission that a proceeding is in the public interest. When the Commission issues a consent order on a final basis, it carries the force of law with respect to future actions. Each violation of such an order may result in a civil penalty of up to $41,484.

The Federal Trade Commission works to promote competition, and protect and educate consumers. You can learn more about how competition benefits consumers or file an antitrust complaint. Like the FTC on Facebook, follow us on Twitter, read our blogs, and subscribe to press releases for the latest FTC news and resources.

CONTACT INFORMATION

MEDIA CONTACT:
Betsy Lordan
Office of Public Affairs
202-326-3707

STAFF CONTACT:
Jordan S. Andrew
Bureau of Competition
202-326-3678