



production fields. Linde is the fifth-largest industrial gas supplier in the United States with 11 liquid atmospheric gas producing plants in the United States, most of which are concentrated in the Midwest, Northeast, and Southeast.

BOC is the world's second-largest industrial gas supplier, and the fourth-largest supplier in the United States. BOC operates 23 liquid atmospheric gas producing plants in the United States, many of which are concentrated in the Midwest, Northeast, and Southeast regions, as well as the West and Gulf Coast regions.

## II

exercise market power unilaterally, thereby increasing the likelihood that purchasers of liquid oxygen or liquid nitrogen would be forced to pay higher prices in these areas. The proposed acquisition provides Linde a larger base of sales on which to enjoy the benefit of a unilateral price increase and also eliminates a competitor to which customers otherwise could have diverted their sales in markets where alternative sources of supply likely are already limited. In addition, in certain geographic markets, Linde and BOC are the two closest competitors to a significant number of customers.

Significant impediments to new entry exist in the markets for liquid o

Therefore, customers would not switch to purchasing refined helium via another method of distribution even if the prices of bulk refined helium distributed by one method increased by five to ten percent.

Refined helium is a rare and expensive gas. Because of its high value, refined helium can be, and is, transported economically on a worldwide basis. Because helium is transported globally, foreign helium capacity and demand impact the demand and pricing for domestically-produced helium. Therefore, it is appropriate to analyze the competitive effects of the proposed acquisition using a worldwide market for bulk refined helium.

The market for bulk refined helium is highly concentrated. Linde and BOC are two of only five companies in the world with access to refined bulk helium; BOC is the second-largest supplier, and a combined Linde/BOC would become the largest. While Linde is currently the smallest of the five, it has substantial new reserves coming on line in the near future, and already is an aggressive participant in the market for refined bulk helium. In addition, certain market conditions, including the relative homogeneity of the firms and products involved and availability of detailed market information, are conducive to the firms reaching terms of coordination and detecting and punishing deviations from those terms. The Commission's complaint charges that the proposed acquisition would enhance the likelihood of collusion or coordinated action among the remaining firms in the market.

There are substantial barriers to entry in the bulk refined helium market. The most significant impediment to entry is securing a source of refined helium. There are no sources of refined helium available that are not committed to market incumbents in long term contracts. A new entrant would need to locate a new source of crude helium and build a refinery. In addition, tens of millions of dollars would be needed to acquire the necessary infrastructure and ancillary distribution assets, including transfill facilities, cryogenic storage trailers, high-pressure tube trailers and liquid dewars, capable of transporting helium from the refinery to customers. While the costs of entering are high, opportunities to recoup these costs are comparatively limited. As with other industrial gases, helium is sold pursuant to long-term contracts, so only a fraction of the market is available at a given time. Given the difficulties of entering the market, it is unlikely that new entry sufficient to counteract the competitive impact of the proposed acquisition would occur in a timely manner in the market for bulk refined helium.

## V. The Consent Agreement

### A. Liquid Oxygen and Liquid Nitrogen

The proposed Consent Agreement remedies the acquisition's likely anticompetitive effects in the markets for liquid oxygen and liquid nitrogen. Pursuant to the Consent Agreement, Linde will divest all of its merchant liquid oxygen and nitrogen producing business in the identified geographic markets. Thus, Linde will divest the eight ASUs listed in Section I to a

single purchaser that will operate the ASUs as a going concern. The Consent Agreement provides that Linde must find a buyer for the ASUs, at no minimum price, that is acceptable to the Commission, no later than six months from the date the Consent Agreement becomes final. If the Commission determines that Linde has not provided an acceptable buyer for the ASUs within this time period, or that the manner of the divestiture is not acceptable, the Commission may appoint a trustee to divest the assets. The trustee would have the exclusive power and authority to accomplish the divestiture.

The acquirer of the divested assets must receive the prior approval of the Commission. The Commission's goal in evaluating possible purchasers of divested assets is to maintain the competitive environment that existed prior to the acquisition. A proposed acquirer of divested assets must not itself present competitive problems. Numerous entities are interested in purchasing the divested ASUs, including industrial gas suppliers that currently have a regional presence in the industry, but do not compete in the areas affected by the acquisition, as well as entities in related fields that are interested in entering the production and sale of industrial gases. The Commission is therefore satisfied that sufficient potential buyers for the divested liquid oxygen and liquid nitrogen assets exist.

The Consent Agreement also contains an Agreement to Hold Separate and Maintain Assets. This will serve to protect the viability, marketability, and competitiveness of the divestiture asset package until the assets are divested to a buyer approved by the Commission. The Agreement to Hold Separate and Maintain Assets became effective on the date the Commission accepted the Consent Agreement for placement on the public record and will remain in effect until Linde successfully divests the divestiture asset package according to the terms of the Decision and Order.

The Commission has appointed Richard Klein to oversee the management of the divestiture asset package until the divestiture is complete, and for a brief transition period after the sale. Mr. Klein has approximately 23 years experience as the Chief Executive Officer of a global specialty chemicals manufacturer, and is well-respected in the industry. In order to ensure that the Commission remains informed about the status of the proposed divestitures, the proposed Consent Agreement requires the parties to file periodic reports with the Commission until the divestiture is accomplished.

#### B. Bulk Refined Helium

The Consent Agreement resolves the proposed acquisition's likely anticompetitive effects in the bulk refined helium market by requiring Linde to divest bulk refined helium assets, including helium source contracts, ancillary distribution assets, and customer contracts, to Nippon Sanso no later than ten days after the acquisition. A buyer upfront remedy was required in this market because the helium assets to be divested do not constitute a stand-alone business and require key third-party consents for their transfer under the Order.

Nippon Sanso is particularly well-positioned to compete successfully with the divested helium assets. Nippon Sanso is the largest industrial and speciality gas company in Japan, and is the sixth-largest industrial gas company in the world. Matheson Tri-Gas, Nippon Sanso's U.S. subsidiary, is the sixth-largest industrial gas supplier in the United States. Although it lacks helium sourcing contracts, Nippon Sanso is one of the world's largest helium distributors, selling helium to end-users in the United States and Japan. (Nippon Sanso, however, does not have current access to bulk refined helium.) Having access to the helium sourcing contracts and other ancillary helium assets will provide Nippon Sanso the ability to grow its helium business in the U.S., European, and Asian markets. Nippon Sanso should be successful in restoring the competition that likely would be lost if the proposed Linde/BOC transaction were to proceed unremedied.

If the Commission determines that Nippon Sanso is not an acceptable purchaser, or the manner of the divestiture is not acceptable, the parties must unwind the sale to Nippon Sanso and divest the bulk refined helium assets within six months of the date the Order becomes final to another Commission-approved acquirer. If the parties fail to divest within six months, the Commission may appoint a trustee to divest the bulk refined helium assets.

The Consent Agreement also contains an Order to Maintain Assets. This will serve to ensure that the helium assets are protected and divested in substantially the same condition existing at the time the Consent Agreement was signed. The Order to Maintain Assets became effective on the date the Commission accepted the Consent Agreement for placement on the public record and will remain in effect until Linde successfully divests the helium assets according to the terms of the Decision and Order.

The Commission has also appointed Mr. Klein to oversee the transition in ownership of the divested helium assets to Nippon Sanso and to ensure Linde's and BOC's compliance with all of the provisions of the proposed Consent Agreement. In order to ensure that the Commission remains informed about the status of the proposed divestitures, the proposed Consent Agreement requires Mr. Klein to file reports with the Commission periodically until the divestiture is accomplished.

The purpose of this analysis is to facilitate public comment on the Consent Agreement, and it is not intended to constitute an official interpretation of the proposed Decision and Order or the Agreement to Hold Separate, or to modify their terms in any way.