new entrants. In applying these standards in *Koch*, for example, the Commission agreed with Koch's definition of product and geographic markets. Koch applied a narrow and broad definition to both markets. Koch argued that if it did not have market power in narrowly defined markets, it would not have market power when the definitions were broadened.

Koch defined the narrow product market as natural gas storage. The narrow geographic market was defined to contain those storage facilities in the states of Texas, Louisiana, and Mississippi that are connected to Koch.

The record showed that Koch owned only 11.9 percent of the contract storage capacity and 6.1 percent of the contract storage deliverability in the narrow market. The market concentration was computed using the Hirschman-Herfindahl Index (HHI) to be .13 for capacity and .12 for deliverability indicating a relatively low concentration in the narrow market.

The Commission also reviewed the fact that five new suppliers may enter the market by 1996 that would potentially have direct connects to Koch.

The broader product market was defined to include non-storage alternatives and storage alternatives not connected to Koch, such as, capacity release of storage in new or existing storage facilities, purchase of natural gas from producers or other marketers, selling gas to customers that have several suppliers, access to no-notice storage, to name a few. The broader geographic market was defined as alternatives outside of Texas, Louisiana and Mississippi.

The Commission gave much consideration to whether or not the alternatives identified by Koch were "good" alternatives. The Commission defined a good alternative as one that is available soon enough, has a price that is low enough, and has a quality high enough to permit customers to substitute the alternative for Koch's service. In addition, the alternative must be available in sufficient quantity to make Koch's price increase unprofitable.

The Commission found that good alternatives were available in sufficient quantities and at competitive prices. The Commission determined that unutilized storage capacity was available in large quantities in Texas, Louisiana and Mississippi during peak periods based on statistics found in EIA's Natural Gas Monthly. The Commission reasoned that if this unutilized capacity was not under contract it was available for purchase.

Unutilized capacity that was committed under contract, the Commission reasoned, would be available through capacity release. Therefore, given the small size of Koch in relation to other storage providers, the abundant storage alternatives available to Koch's customers, and that the alternatives are "good" alternatives, the Commission concluded that Koch could not exercise market power in providing storage service.

2. The Experience After Approving Market-Based Rates

The market-based storage cases approved by the Commission (Richfield, Petal, Transok, Bay State, Avoca, and Koch) are quite recent. The companies in question were not subjected to any special reporting requirements. Thus, there is little information currently to evaluate these decisions. In addition, the pipelines in several of these cases executed long term contracts at the same time they were seeking market based rates. The contracts set the prices for the term of the contract. No complaints have been filed so far regarding the market based storage rates. However, one would not expect to see the complaints so early in the process. Complaints would be more likely to occur when the parties seek to negotiate new pricing provisions at the end of the contract term, if new capacity becomes available, or if the circumstances which served as the basis of the Commission's decision changed.

Earlier, however, the Commission approved an experiment wherein Koch storage was allowed to charge any price it could negotiate up to a cap which exceeded the cost-based rate. The Commission did not make a finding that Koch lacked significant market power. The results of the "Market Responsive Storage and Delivery Service" (MRSDS) experiment suggest that competition constrained Koch to prices actually below the cost-based rates. All marketbased MRSDS rates charged by Koch were below the cap. During the two full heating seasons of the experiment, customers fully subscribed all the capacity allocated to MRSDS.27

C. The Oil Pipeline Cases

In the oil pipeline area, two companies have the authority to charge market-based rates—Buckeye Pipe Line Company, L.P. (Buckeye) and Williams Pipe Line Company (Williams). In both cases the Commission determined that the pipeline lacked market power in

markets for which each was allowed to charge market-based rates.²⁸

1. The Analysis Used

In conducting its analysis of whether the applicant had market power, the Commission first defined the product and geographic markets. It then evaluated whether the applicant had significant market power in those markets by first doing an initial screen for market concentration in each market (using the Herfindahl-Hirschman Index) and then considering, weighing and balancing a number of other factors, such as, the potential entry of competitors into the market, available transportation alternatives, market share, availability of excess capacity, and the presence of large buyers able to exert downward monopsonistic pressure on transportation rates.

In Buckeye, for example, the relevant product market was defined as the transportation of refined petroleum products. The Commission agreed with the ALJ and rejected the position advanced by ATA that the product market should be markets in which Buckeye transports only jet fuel. The Commission concluded that the ease of product substitution among pipelines is an important reason why the relevant product market should be the transportation of refined petroleum products rather than the transportation of a specific petroleum product, such as gasoline, fuel oil or jet fuel.

The relevant geographic markets were defined as the areas that include all supplies of transportation from all origins to United States Department of Commerce, Bureau of Economic Analysis Economic Areas (BEAs).²⁹ The Commission concluded that the evidence of record supported the findings of the ALJ that BEAs are shown to be appropriate geographic markets since they are convenient, easily identified and have been used in past studies of the oil pipeline industry.

The Commission also concluded that an analysis of market concentration using HHIs should be the first step in evaluating the likelihood of market power being exercised in a given market. Knowing the degree of concentration in a market provides useful information about where on the competitive spectrum that market lies

 $^{^{27}}$ Koch Gateway Pipeline Co., 66 FERC \P 61,385 at 62,301–302 (1994).

 $^{^{28}}$ Buckeye Pipe Line Company, L.P., 53 FERC \P 61,473 (1990). Williams Pipe Line Company, 69 FERC \P 61,136 (1994). Both cases were litigated and the Commission made its findings that certain markets were competitive based on the records presented at the hearings.

²⁹ BEAs are geographic regions surrounding major cities that are intended to represent areas of actual economic activity.