associated with a much higher cost than the applicant's cost-based rates, i.e., it must give roughly the same netback.

In contrast, the ultimate destination market for gas is typically a city-gate. There, the applicant must identify the transportation alternatives available to endusers and LDCs who want to receive gas in this area. To define a destination market, the applicant must demonstrate that its customers are physically connected to alternative gas transportation facilities that move gas into the area.⁵⁴ The applicant must also demonstrate that those alternatives will deliver gas at a price no higher than would be paid with the use of the applicant's transportation service to deliver gas into the area.55

Applicants for market-based rates might allege that LPG and LNG can be good alternatives to the use of applicant's transportation service. If so, the applicant must show that there are sufficient quantities of these available, and the transport of LPG and LNG into the destination market (e.g., by truck) provides gas at an overall delivered price no higher than the overall delivered price from pipeline transport with a fifteen percent transportation rate increase on the pipeline's transportation rate

c. Summary and Conclusion

Thus, in order to specify a gas transportation market, the applicant must first identify all products and services available as good alternatives to the applicant's customers. Next, the applicant must identify the origin and destination of that transportation. The relevant geographic market will be defined in two steps: First, those alternative sellers that offer service between the same origin and destination markets and second, all economically substitutable transportation sold by pipelines (or other good alternative products and services) serving either the origin market or the destination market.

2. Firm Size and Market Concentration

Pipelines might be able to exercise market power if customers have few good alternatives to the pipeline's service either, in the first instance, over a given route or, in a second analysis, separately in origin and destination markets. The applicant might have market power in the origin market if producer/shippers have few good alternatives to transport their product out of the origin area. In the destination market, pipelines might be able to exercise market power if downstream customers have few good transportation alternatives that reach their city-gates. If customers have long term supply contracts, it will be particularly important for the pipeline to demonstrate that it has no market power over customers on a given route.

There are two ways in which a seller can exercise market power. It can attempt to raise its price *acting alone* or it can attempt to raise its price by *acting together with other sellers*.

i. Acting Alone

One of the indicators which has been examined to determine whether a seller could exercise market power acting alone is the seller's market share. A large market share is generally a necessary condition for the exercise of market power. If the seller has a small market share it is unlikely that it can exercise market power. But, a company with a large market share may not be able to exert market power if entry into the market is easy ⁵⁶ or there are other competitive forces at work.

The applicant must submit calculations (and supporting data) of its market share in all relevant origin and destination areas.

ii. Acting Together with Other Sellers

A second way in which a seller can exercise market power is to act together with other sellers to raise prices. To evaluate whether a seller can act together with others to exercise market power, the Commission has typically examined the market's concentration.

To measure market concentration, one generally considers the summary measure of market concentration known as the Herfindahl-Hirschman Index (HHI). If the HHI is small, less than .18, then one can generally conclude that sellers cannot exercise market power in this market. A small HHI indicates that customers have sufficiently diverse sources of supply in this market that no one firm or group of firms acting together could profitably raise market price. If the HHI is greater than .18 then

additional analysis is needed to determine if the seller can exercise market power.

The applicant should be required to submit calculations of the HHI for the relevant markets. The HHI must be computed for each origin market as well as each destination market. The Commission should require applicants to submit information for each mainline receipt point (origin market) and each delivery point (destination market). If the applicant wishes to argue for a broader market definition it should also include calculations for its market definitions. Only sales or capacity figures associated with good alternatives should be used in calculating the HHI. In calculating the HHIs, the applicant should be required to aggregate the capacity of affiliated companies into one estimate for those affiliates as a single seller.57

In the GIC cases, the Commission established a threshold level for the HHI at .18.58 In an oil pipeline case, the Commission used $.\bar{2}5$ as an initial screen.59 The Commission may wish to establish a standard under which it will presume no potential for the exercise of joint market power exists. Since the Commission has a positive obligation under the Natural Gas Act to "protect consumers against exploitation at the hands of natural gas companies," 60 staff believes it would be appropriate to use the relatively strict initial screen of .18. This would indicate that there are four to five good alternatives to the applicant's service in each market.

3. Entry and Other Competitive Factors

Even if the applicant's market share were large in a concentrated (and properly identified) market, one might not conclude that the applicant would be able to exercise market power. For

⁵⁴ The applicant could include a seller in the destination market if the seller can connect to the customer sufficiently cheaply that the customer pays a delivered gas price no higher than that paid when using the applicant's FT service.

⁵⁵The geographic market is a region in which a hypothetical monopolist that is the only present or future provider of the relevant product at locations in that region would profitably impose a least a "small but significant and nontransitory" increase in price. In the case of an destination market, a service is a good alternative if the delivered gas price using the alternative is less than or equal to the delivered gas price using the applicant's facilities after the price increase.

⁵⁶ Given the nature of the interstate pipeline industry, ease of entry would be difficult to show except in cases involving minor facilities. For major facilities, the cost of construction and the time needed for environmental analysis would suggest that entry may not be easy.

⁵⁷ The capacity on pipeline systems owned or controlled by the applicant's affiliates should not be considered among the customer's alternatives. Rather, the capacity of its affiliates offering the same product should be included in the market share calculated for the applicant. Similarly, alternative pipelines must be aggregated with their respective affiliates in order to identify meaningful alternatives to customers. It is not reasonable to expect a profit-maximizing firm to allow its affiliates to compete with one another.

 $^{^{58}}$ El Paso Natural Gas Company, 49 FERC ¶ 61,262 (1989). See also Buckeye, 53 FERC at 62 667

 $^{^{59}}$ See Williams Pipe Line Co., Opinion No. 391, 68 FERC ¶ 61,136 (1994).

⁶⁰ FPC v. Hope Natural Gas Co., 320 U.S. 591, 610 (1944). See also Elizabethtown, supra n. 6 (sustaining the Commission's approval of market pricing based on the Commission's conclusion that the pipeline's markets were sufficiently competitive to preclude it from exercising significant market power); Farmers Union II, supra n.2 (holding that the Commission cannot merely assume that competition will ensure just and reasonable prices).