

Exhibit No. _____ (BMS-1)

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Egan Hub Partners, L.P.

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Docket No. CP96-199 _____

**PREPARED STATEMENT
OF
BRUCE M. SLOAN**

On Behalf of:

Egan Hub Partners, L.P.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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PREPARED STATEMENT
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I. INTRODUCTION

Q. Please state your name and occupation.

A. My name is Bruce M. Sloan. I am a Senior Consultant at Micronomics, Inc. Micronomics, Inc. is an economic research and consulting firm with offices in Los Angeles, CA, Sacramento, CA, and Washington, D.C.

Q. What is your business address.

A. My business address is 1201 New York Avenue, N.W., Washington, D.C. 20005.

Q. Please describe your educational and professional background.

A. I received my bachelor's degree with honors in economics from Connecticut College in 1973 and my masters in Business Administration from George Mason University in May 1995. Since 1973, I have worked at the economic consulting firms of

National Economic Research Associates, Inc. (“NERA”), Putnam, Hayes and Bartlett, Inc. (“PHB”), and Law & Economic Consulting Group, Inc. (“LECG”). I joined Micronomics, Inc. in December 1995.

During my consulting career, I have directed projects involving a broad range of economic issues in the natural gas, electric utility and telecommunications industries, as well as in other unregulated industries as diverse as aerospace equipment and automobiles. Throughout my professional career, I have been particularly heavily involved in issues relating to the application of antitrust principles to the electric utility industry.

My professional background and experience are described more fully in Exhibit No. __ (BMS-2), attached to my prepared statement.

Q. What is the purpose of your statement?

A. I assisted with the preparation of an earlier economic analysis filed by Egan Hub Partners, L.P. (Egan Hub) on February 16, 1996 in Docket No. CP96-199-000 (the 1996 Egan Market Study).¹ Since then, the Commission has clarified its policy on market-based rates in the Statement of Policy on Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines.² (Hereinafter referred to as the

¹ See Prepared Statement of George R. Hall, Egan Hub Partners, L.P. (February 16, 1996) at tab I. (Egan updated this study following the Policy Statement in July 1996.)

² See Statement of Policy and Request for Comments - Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines, 74 FERC ¶61,076 (1996).

“Policy Statement”.) The Commission further outlined the requirements necessary to demonstrate a lack of market power in connection with authority to charge market-based rates for “hub services” in its decision issued on October 7, 1996.³ The only hub services (along with storage) MHP seeks market based rates for are, interruptible “wheeling” transactions from one pipeline interconnection to another across Egan Hub’s facilities, interruptible short term storage, title transfer and related services. These services are currently being provided by Egan Hub. In January 1997, FERC granted Egan Hub approval to reallocate certificated storage capacity from Egan Hub’s Cavern 2 to Cavern 1 in order to provide service to potential customers during the 1996-97 heating season. Egan Hub is filing this application to seek approval to expand the capacity at Egan Hub to 12 Bcf of working gas capacity and requisite pad gas capacity. I have been asked by Market Hub Partners (“MHP”) to update the 1996 Egan Hub market study based on the proposed capacity expansion of the Egan Hub facilities.

Q. Please outline your statement.

A. The Statement contains a description of Egan Hub’s facilities and the services that Egan Hub offers (Section II). Section III discusses the Commission’s requirements

³ Egan Hub Partners, L.P., 77 FERC ¶61,016 (1996).

that Applicants must satisfy to receive authority to implement market-based rates. Section IV contains updated market power analyses for the services to be provided by Egan Hub, including both storage and hub services based upon the proposed capacity expansion. Section V presents my conclusions based on the results of the updated market power analyses.

Q. Please summarize your conclusions.

A. Based on the results of my market power analyses for storage and hub services, I conclude that Egan Hub does not possess market power over either storage or hub services. Therefore, the Commission should allow Egan Hub to continue charging market-based rates for these services.

My market power analysis indicates that the Herfindahl-Hirschman Index("HHI") for storage services is only 690 for peak day deliverability and 856 for working gas capacity. These HHIs are significantly below the 1800 level that the Policy Statement sets as a threshold for further analysis because it indicates a concern for market power. There are 45 alternative storage facilities available to Egan Hub customers in Texas and Louisiana. In addition, there are six facilities currently under construction in Texas and Louisiana, which indicate low barriers to entry. These market measures indicate that Egan Hub does not possess market power in connection with storage services and that there are numerous alternatives available to Egan Hub's customers should Egan Hub attempt to raise prices above competitive levels. Therefore, I conclude that the Commission should allow Egan

Hub to continue charging market-based rates for storage services.

In connection with hub services, there are nine alternative hubs available to Egan Hub customers in Texas and Louisiana. The “bingo card” analysis that I have prepared to conform with the Commission’s precedent on market power indicates that there are 76 alternative bi-directional paths for shippers at Egan Hub to transfer natural gas among pipelines at Egan Hub.

There are 37 additional incoming bi-directional interstate interconnections on pipelines connected to Egan Hub with 5,962 MMcf per day of available capacity. This represents 1.7 times the total rated incoming capacity at Egan Hub. There are 48 additional outgoing bi-directional interstate interconnections on pipelines connected to Egan Hub with 7,861 MMcf per day of available capacity. This represents 2.2 times the total rated outgoing capacity at Egan Hub. This analysis indicates that customers at Egan Hub have numerous alternatives if Egan Hub raises prices above competitive levels. Egan Hub customers have paths available to the nine alternative hubs on pipelines interconnected to Egan Hub. The HHI based on the incoming available throughput at hubs in Texas and Louisiana is 1,669. The HHI based on the outgoing available throughput at hubs in Texas and Louisiana is 1,712. Both of these measures indicate that Egan Hub does not possess market power in connection with interruptible hub services. Given the numerous other hub services alternatives available to Egan Hub customers, Egan Hub will be unable to raise and sustain supra-competitive price levels. Therefore, I conclude that the Commission should allow Egan Hub to continue to charge

market-based rates for hub services.

II. DESCRIPTION OF EGAN HUB FACILITIES

Q. Please describe Egan Hub.

A. Egan Hub is a limited partnership with Egan Hub Partners, Inc., the sole general partner and Market Hub Partners, L.P. (MHP), the sole limited partner. The facility consists of two salt dome storage caverns, one that is currently operational and another that is under construction. Aggregate certified capacity of Caverns 1 and 2 is currently 9.5 Bcf. Through the instant application Egan Hub's total working capacity will be expanded to 12 Bcf for a total operational capacity of approximately 15.5 Bcf. Current peak day deliverability is 1,500 MMcf per day and this will not change after the expansion of the facility.

Egan Hub's header system enables Egan Hub to transport, store and/or deliver gas from six interstate pipelines: ANR Pipeline Company, Columbia Gulf Transmission Company, Tennessee Gas Pipeline Company, Texas Gas Transmission Corporation, Transcontinental Gas Pipe Line Company (Transco)⁴ and Trunkline Gas Company. Incoming and outgoing capacity of pipelines interconnected at Egan Hub is currently 1,500 MMcf per day (300 MMcf per day at five interconnects) but is expected to increase to 3,600 MMcf per day (600 MMcf per day at six interconnects). This includes Transco. Egan Hub has long-term gas

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The interconnection with Transco is being negotiated. The following analysis assumes that the negotiations will be successful. Accordingly, the analysis overstates Egan Hub's current market share but is representative of future conditions.

storage agreements with customers listed in Exhibit No. ____ (BMS-3). As shown there, The East Ohio Gas Company, Northern Indiana Public Service Company, TPC Corporation, Miami Valley Resources, Inc., ANR Pipeline and Aquila Energy Marketing have commitments for 4,700,000 MMBtu of firm storage capacity and 335,000 MMBtu of firm deliverability.

Q. What services does Egan Hub offer?

A. Egan Hub offers long-term firm storage services and interruptible hub services. The interruptible hub services include: 1) parking or peaking interruptible capacity services; 2) wheeling or movement of gas from one pipeline to another over the Egan Hub header facilities; 3) intra-hub transfer of gas from one shipper to another; 4) balance and imbalance trading or use of gas a customer has borrowed to keep its agreements with a pipeline within tolerance limits; 5) loans or loaning of gas to be repaid at a later time; 6) gas title transfer or change in the name and/or contract under which gas is flowing on connecting pipelines.

III. REQUIREMENTS FOR MARKET-BASED RATE AUTHORITY

Q. Has the Commission set forth the requirements that must be satisfied for it to approve market-based rate authority for individual companies?

A. Yes, it has set forth requirements for market-based rate authority in the Policy Statement and has further clarified the requirements in the recently issued Egan Hub decision.⁵ As discussed in the Policy Statement, the Commission has determined that an Applicant for market-based rate authority must demonstrate that it lacks significant market power. Although the Commission evaluates proposals for market-based rates on a case-by-case basis, it considers a variety of factors to determine whether an Applicant may have market power. Typically, the Commission reviews the project's market share and market concentration, excess capacity in the market available to shippers, the number and type of alternatives available to shippers and barriers to entry. In addition, the Commission requires that an individual company seeking approval to charge market-based rates must demonstrate that it cannot exercise market power by raising and sustaining a rate of increase of 10 percent or more over competitive levels for a period of two years or more.

The Egan Hub decision outlines the Commission's requirements for approval

⁵ Egan Hub Partners, L.P. 77 FERC ¶61,061 (1996).

of market-based rates for hub services, as well as storage services. As indicated in the Egan Hub decision, the Commission does not include alternatives to Egan Hub's services which are planned or not currently in existence in calculating HHIs to assess Egan Hub's market power. In connection with storage facilities, the Commission distinguishes between production area storage, such as the Egan Hub facility, and market area storage. The Commission has approved market-based rates for production area storage in Richfield Gas Storage System, 59 FERC ¶61,316 (1992); Transok, Inc., 64 FERC ¶61,095 (1993); Koch Gateway Pipeline Company, 66 FERC ¶61,351 (1994); Ouachita Gas Storage Company, L.L.C. 68 FERC ¶61,402 (1994) and order issuing certificate, 76 FERC ¶61,139 (1996); Bay Gas Storage, 66 FERC ¶61,351 (1994); Equitable Storage Company, 75 FERC ¶61,081 (1996); Petal Gas Storage Company, 64 FERC ¶61,190 (1993) and Egan Hub Partners, L.P. 77 FERC ¶61,061 (1996). The Commission has also approved market-based rates for market area storage in Avoca Natural Gas Storage, 68 FERC ¶61,045 (1994) and Steuben Gas Storage, 73 FERC ¶61,102 (1995). The Commission has approved market-based rates for interruptible hub services in Egan Hub Partners, L.P., 77 FERC ¶61,016 (1996).

As stated in the Egan Hub decision, approval of market-based rates is subject to re-examination if significant change occurs in Egan Hub's market power status. The decision indicates that Egan Hub's construction of additional storage caverns could alter competitive forces. Because Egan Hub is proposing an increase in capacity to support additional storage and hub services, my updated

market power study therefore addresses the Commission's concern that a change in Egan Hub's facilities might affect Egan Hub's lack of market power.

In order to assess the potential exercise of market power, the Policy Statement requires that the analysis must properly identify the relevant product and geographic market for the proposed service. In addition, the number and type of alternatives available to potential customers of the proposed service have to be identified. The size of the market must be measured and market shares of participants in the market must be calculated to assess the likely presence of market power. Market shares are then used as screens to determine the level of concentration in the market by calculating the HHI. As indicated in the Policy Statement, a small HHI indicates that sellers cannot exercise market power because customers have sufficiently diverse sources of supply in the relevant market and because no one firm or group of firms acting together could profitably raise prices. The Commission has indicated that it will use 0.18 HHI (or 1,800 HHI) as a screen indicating that closer scrutiny is warranted because a HHI of 0.18 indicates that the market is relatively concentrated and that the Applicant may have significant market power. In addition, the analysis requires an examination of the ease of entry by potential competitors. This is especially important because a firm will not be able to sustain a price increase of 10 percent or more over a two year period if competitors can enter the market easily in reaction to price increases above competitive market levels.

IV. EGAN HUB MARKET POWER ANALYSIS

Q. Have you used the analytic framework required by FERC and which is outlined above to determine whether Egan Hub, after the capacity expansion, could exercise significant market power?

A. Yes. In the analysis that follows, I define the relevant market for Egan Hub's proposed services, identify comparable alternatives to Egan Hub's services that are available to Egan Hub's customers, present data on the size of the market, market shares and HHI screens, present information on the ease of entry of potential competitors with Egan Hub's services and examine the likelihood that Egan Hub will be able to raise prices above competitive levels. My analysis demonstrates that there are many alternatives available to potential customers of Egan Hub's services in sufficient quantity so that customers could displace Egan Hub services should it attempt to raise prices above competitive levels. This is consistent with the Commission's initial evaluation of Egan Hub's ability to exercise market power. In short, my analysis demonstrates that, even with the proposed expansion, Egan Hub will not possess sufficient market power for storage or hub services to warrant any change in its authority to charge market based rates.

A. Market Definition

Q. Please define the relevant market.

A. Egan Hub proposes to charge market-based rates for firm storage and interruptible hub services. These products constitute the relevant product markets for the

updated Egan Hub market power analysis.

Egan Hub has one affiliated storage operator currently offering service -- Moss Bluff Hub Partners, L.P. (Moss Bluff)⁶ and two affiliated hub service providers, Moss Bluff and TOMCAT. The relevant market for Egan Hub's services includes all products and geographic areas to which customers can economically substitute comparable products in order to avoid any attempt by Egan Hub to exert market power as to its services. The earlier 1996 Egan Hub Market Study defined the relevant geographic market to include all storage and hub facilities in the states of Texas, Louisiana and Mississippi. That geographic market definition included all locations where Egan Hub has the potential to provide actual or future storage and hub services. The October 7, 1996 Egan Hub decision clarified the Commission's policy concerning geographic market definition and specified that only those locations where there are existing facilities or facilities currently under construction should be included in the market power analysis.

⁶ In the Egan Hub decision, the Commission stated that it considers only existing facilities, or facilities under construction, as relevant to the market analysis. As a result, Egan Hub's affiliated storage providers, Mistex Hub Partners, L.P. and N.E. Hub Partners, L.P. are not included in the Egan Hub market analysis.

Consistent with the Commission policy regarding geographic market definition, the relevant geographic market for Egan Hub adopted in my analysis includes only Texas and Louisiana. This encompasses almost the same geographic market as defined for Egan Hub in the 1996 Egan Hub market study, except that it does not include Mississippi, which has no existing affiliated hubs. Therefore, one would expect similar results from the market power analysis for the updated Egan Hub analysis as was determined for the earlier Egan Hub study, although leaving Mississippi out of the analysis makes my current approach more conservative than the broader market definition.

Q. Have you prepared market power analyses for firm storage services and interruptible hub services?

A. Yes. I have prepared a separate market power analysis for the two relevant products that Egan Hub offers potential customers.

B. Storage Services

Q. Have you evaluated alternative storage facilities which may be available for potential customers at Egan Hub?

A. Yes. Exhibit No. ____ (BMS-4) lists relevant storage facilities currently available in Texas and Louisiana. There are a total of 45 alternative storage facilities located in the two state area. Working gas capacity of these facilities consists of 654,955 MMcf, and Egan Hub accounts for only 1.77 percent of the total working gas

capacity in the two state area. In accordance with Commission policy concerning affiliate operations, my analysis combines the Egan Hub⁷ and Moss Bluff market share and determines that it accounts for only 3.53 percent of the working gas capacity available in Texas and Louisiana. The HHI total based on working gas capacity for storage in the two states is only 856, which is well below the Policy Statement screen indicating concern for existence of market power.

Total peak day deliverability in Texas and Louisiana for the 45 storage facilities is 14,426 MMcf per day, as shown on Exhibit No.____ (BMS-5). Egan Hub accounts for only 8.76 percent of peak day deliverability of storage facilities located in the two states and the combined market share of Egan Hub and Moss Bluff totals 15.77 percent. HHIs based on peak day deliverability of the storage facilities in Texas and Louisiana are only 690, well below any threshold for concern about market power as stated in the Policy Statement.

- Q. Are there any other factors that the Policy Statement discusses that should be considered in a market power analysis?
- A. Yes, the Policy Statement states that ease of entry is another competitive factor that demonstrates that an applicant lacks market power.

⁷ The TOMCAT facility does not contain storage facilities or provide storage services.

Q. Please describe your conclusions concerning ease of entry as they relate to storage facilities.

A. Currently, there are six storage projects being planned in Texas and Louisiana with working gas capacity of 73,000 MMcf. As shown in Exhibit No. _____ (BMS-6), three of these projects are located in Louisiana (HNG, Matrix Gas Corp. and Williams) and three are located in Texas (HNG, Gulf States Utilities Company and KEBO Oil).

In other cases involving market-based rates for storage facilities in the Gulf Coast area, the Commission has determined that ease of entry is made evident by the large number of storage providers in the area. In addition, the Commission has previously found market-based rates to be appropriate for certain other storage providers in the market.⁸

Q. What conclusions can you draw from your analysis of potential market power concerning storage facility services at Egan Hub?

A. The market power analysis for storage services indicates that Egan Hub does not possess market power. It is also evident that entry into Egan Hub's markets is easy, exists, and it is unlikely that Egan Hub could effectively raise prices for storage services above competitive levels without sustaining customer losses to other existing storage facilities and without encouraging entry by other potential storage

⁸ Enron Storage Company, 73 FERC ¶61,206 (1995); Steuben Gas Storage, 73 FERC ¶61,102 (1995); Ouachita River Gas Storage, L.L.C., 68 FERC ¶61,402 (1994); Avoca Natural Gas Storage, 68 FERC ¶61,045 (1994); Petal Gas Storage Company, 64 FERC ¶61,190 (1993); and Egan Hub Partners, L.P., 77 FERC ¶61,016 (1996).

facility providers. Therefore, the Commission should allow Egan Hub to continue charging market-based rates for storage services.

C. Hub Services

Q. Have you evaluated alternative paths for shippers at Egan Hub seeking interruptible hub services at Egan Hub?

A. Yes. In connection with hub services, the Commission requires that the Applicant show that there are sufficient alternatives available to customers before it approves market-based rate authority. As a first step, alternative bi-directional interconnects for pipelines to a hub are evaluated in a matrix form or “bingo card” to ensure that, for every possible combination, at least one alternative path exists. Exhibit No. _____ (BMS-7) presents a “bingo card” of the Egan Hub facility. As mentioned above, six interstate pipelines interconnect with Egan Hub, thereby creating 30 possible interconnects. Egan Hub’s “bingo card” is completely filled in, which demonstrates that alternatives exist for each of the 30 possible interconnects at the hub. As shown on Exhibit No. ____ (BMS-7), there are 76 alternative paths for gas to move among pipelines at Egan Hub, with as many as five alternatives at some of the interconnects.

Q. What conclusion do you reach from this bingo-card analysis?

A. Egan Hub is a production area storage and hub service provider. As such, it is not surprising that as many as 76 bi-directional alternatives exist to move gas among

the pipelines interconnected at Egan Hub. Given the large number of alternatives available to shippers on pipelines interconnected at Egan Hub, I conclude that it is very unlikely that Egan Hub could exercise market power. This is consistent with the initial findings of the Commission concerning Egan Hub.

Q. Have you evaluated whether unused incoming and outgoing alternative bi-directional capacity exists for pipelines interconnected at Egan Hub?

A. Yes. Exhibit No.____ (BMS-8) shows the number of bi-directional alternative pipeline interconnections to each pipeline interconnected at Egan Hub. There are 37 incoming bi-directional interconnection alternatives and 48 outgoing bi-directional interconnections among the six pipelines at Egan Hub. Exhibit No.____ (BMS-9) shows that among the 37 incoming alternatives, the total capacity of these alternatives amounts to 6,984 MMcf per day, of which only 1,022 MMcf per day is currently utilized. Therefore, the accumulated excess capacity (5,962 MMcf per day) is approximately 1.7 times greater than the existing available incoming capacity at Egan Hub. The total outgoing capacity of these alternatives amounts to 9,268 MMcf per day, of which only 1,407 MMcf per day is currently utilized, as shown on Exhibit No.____ (BMS-10). Thus, for outgoing capacity, the accumulated excess capacity (7,861 MMcf per day) is approximately 2.2 times greater than the total outgoing capacity at Egan Hub.

Q. What conclusions do you draw from this analysis?

A. Given the large amount of unused capacity on alternative pipeline interconnections that is available on pipelines that interconnect with Egan Hub, it is evident that Egan Hub cannot exert market power in connection with hub services available at Egan Hub.

Q. Have you examined customer alternatives for hub services?

A. Yes, I have identified nine existing hubs in the Texas and Louisiana area that could be substituted for the Egan Hub services. There are five hubs located within Texas and four hubs located within Louisiana that offer services that could substitute for Egan Hub's services. Texas hubs include: East Texas, Houston, Spindletop, Texaco's Star Center, and Western Resources-Katy. In Louisiana, the alternative hubs include: Henry, Jefferson Island, Louisiana and Perryville. As shown on Exhibit No. ____ (BMS-11), most hub services available at Egan Hub are available at the nine other hubs.

Q. Please indicate whether the pipelines interconnected at Egan Hub can provide transportation to these hubs.

A. Yes. Exhibit No. ____ (BMS-12) provides a matrix of the six pipelines interconnected at Egan Hub and the nine other hubs to which these pipelines can provide access. There are 41 potential paths (35 direct paths and 6 indirect paths) to the nine other hubs by means of pipelines interconnected at Egan Hub.

Q. Have you determined whether sufficient unutilized capacity exists at these hubs to be considered alternatives to potential customers at Egan Hub?

A. Exhibit No. _____ (BMS-13) presents a summary of unutilized incoming and outgoing capacity available at Egan Hub, Moss Bluff and TOMCAT and the other nine relevant hubs that potential customers could use as substitutes for Egan Hub hub services. Egan Hub represents only 20.23 percent of the incoming capacity and 20.27 percent of the outgoing capacity available at the relevant hubs. The combined Egan Hub, Moss Bluff and TOMCAT market share of available incoming and outgoing capacity represents 29.47 percent and 32.08 percent, respectively. The HHIs based on these market shares indicate that the incoming available capacity market at these hubs is moderately concentrated, given the market HHI of 1,669. The outgoing available capacity market at those hubs have a HHI of only 1,712, which would also be considered to be a moderately concentrated market under the Policy Statement guidelines.

Q. What conclusions do you reach in connection with the analysis of available capacity at relevant hubs?

A. Given the fact that these hubs are located in the production area, there are numerous alternatives available for potential hub services to potential customers at the Egan Hub facilities. Available capacity at alternative hubs is 2.4 times the total incoming capacity at Egan Hub and is 2.1 times the total outgoing capacity at Egan Hub. Realistically, there can be little concern that Egan Hub could profitably raise its

rates for hub services and maintain those rates over a substantial period of time. Therefore, because the market power analyses indicate that Egan Hub does not have market power over hub services, the Commission should authorize Egan Hub to continue to charge market-based rates for those services.

- A. An examination of trade press articles indicates that a number of additional hubs are currently being developed. Virtually any location where there are multiple pipeline interconnections and storage facilities could be developed easily into market hubs. According to Natural Gas Focus,⁹ many traditional and new storage developers are proclaiming themselves to be hubs rather than merely providers of storage services. Therefore, since I conclude that there are low entry barriers for storage service, it is axiomatic that there are low entry barriers to hub services providers.

⁹ Hart, "Creative Marketing," Natural Gas Focus, November 1995, pp. 10-14.

CONCLUSIONS

Q. What conclusion do you reach concerning the market power potential of the Egan Hub as the Applicant proposes to expand it?

A. I conclude that Egan Hub does not possess and will not obtain market power in connection with storage services or hub services. Egan Hub is located in the production area where numerous storage and hub services alternatives exist for potential customers at Egan Hub.

Finally, the Commission has already approved market-based rates for hub services at Egan Hub based on the evidence of sufficient customer options. Even with the expansion of the Egan Hub facility, these numerous customer options still exist. The expansion of the Egan Hub facility increases the available capacity in a market where the pipelines are already underutilized. Therefore, I conclude that the Commission should grant market-based rate authority at Egan Hub because it does not possess any market power over storage or hub services.