The University of Houston's Global Energy Management Institute ("UH-GEMI") has been at the forefront of the debate over how to improve the process of collecting and disseminating gas and electricity prices in order to help restore confidence to an industry that has been shaken by the breakdown of this process in the recent past. UH-GEMI has pioneered the concept of an "energy data hub"—an independent, neutral third party that collects and disseminates prices and volumes derived from matched energy transactions.

Given our intimate and extensive involvement in this matter, we are pleased to see FERC's continuing engagement with price reporting issues. The June 13, 2003 Staff Paper is extremely constructive, and does a good job at capturing the key elements in the debate. The Staff Paper asks the right questions, and we appreciate the opportunity to provide our answers to them—answers that draw upon both extensive analysis of the relevant issues and numerous conversations with knowledgeable industry participants. In addition to our responses to the specific queries raised in the Staff Paper, we also attach for inclusion in the record a presentation and a white paper that elaborate on the UH-GEMI model and the economic rationale behind it.

The UH-GEMI model has several salient features. These include:

- A single data hub to which market participants report price, volume, buy/sell, and counterparty data;
- Matching of transactions in the data hub to ensure that submitted data reflects only bona fide transactions;
- Measures (whether a regulatory mandate or a private industry initiative) to ensure that a critical mass of participants submit data;

- Open access to price and volume data on a non-discriminatory basis;
- Independent governance with independent directors receiving information and counsel from industry advisory panels;
- Independent audit;
- Non-profit organizational form.

Our position to many questions raised in the FERC Staff Paper are implicit in the structure of our model. Our responses to specific questions and issues are as follows:

1. Commission Access to Price Data. Confidence in the energy marketplace depends in large part on the reality and the perception that market participants are acting in accordance with existing rules and regulations. Moreover, the accuracy and justice of the regulatory process requires that (a) regulators are able to identify violations of relevant rules and regulations, and (b) regulators do not erroneously accuse market participants of violations where none have occurred.

The Commission can best achieve these objectives when it has access to the relevant market data. Absent reliable data on market prices, the Commission is more likely to miss episodes of misconduct; it is also more likely to mistakenly accuse participants of misconduct where none has occurred. The poorer the data available to the Commission, the greater the difficulties it will face in restoring confidence that the marketplace is operating in an efficient and equitable fashion. Commission reliance on poorer quality data also increases regulatory uncertainty. Thus, in our opinion, market participants acting in a commercially legitimate fashion will benefit if FERC (and other relevant Federal authorities) have timely access to the data collected by the hub.

As a consequence, UH-GEMI believes that the Commission should have access to any data submitted to the data hub. However, procedures for access should be established in advance. These procedures should provide legal and regulatory certainty to market participants, and respect the legitimate concerns of data providers, while at the same time ensuring that the relevant agencies will have timely access to the data to permit them to enforce the laws and regulations that govern energy trading.

FERC should also consider that its ability to access data is likely to influence the incentives of market participants to provide data to a collection and dissemination entity absent a mandate to do so. In particular, FERC access to data may provide a strong disincentive for market participants to provide transaction data voluntarily. We discuss this in more detail below.

2. <u>Mandated Reporting</u>. As the attached white paper sets out in detail, effective and accurate price reporting requires participation by a substantial portion of transactors. Indeed, the ability to match buys and sells—the main guarantor of accuracy and protection against fraudulent reporting—grows geometrically with participation rates. Therefore, any price reporting methodology requires substantial participation by market participants.¹

This leaves open the question of how a high participation rate is to be achieved. Mandated reporting would result in a high reporting rate. However, it

trades at a less liquid point with a small number of total transactions is far less statistically reliable.

¹ Given some simplifying assumptions, the percentage of total transactions matched is approximately the square of the percentage of market participants submitting data. Thus, if 50 percent of market participants report trades, roughly 25 percent of transactions can be matched. If 80 percent report, roughly 64 percent can be matched. Although capturing 25 percent of trades may provide a statistically reliable measure of price at a liquid point with a large number of transactions, a price derived from such a small fraction of

is possible that a voluntary effort encompassing a large fraction of market participants could also result in a high participation rate.²

It should be noted that voluntary efforts face several difficulties. First, there are well-known coordination and free rider problems that can impede voluntary efforts of this type. Second, especially given the (vertically and horizontally) fragmented nature of the energy marketing chain, it may take considerable time to coordinate a voluntary effort. This is particularly true given that there is no existing SRO for the OTC energy market analogous to SROs in the financial markets.

A mandate would likely be the quickest way to create a high participation rate. It should also be noted that transparency initiatives in other markets—most notably the financial markets—have been mandated by regulatory or self-regulatory authorities.³

UH-GEMI is perfectly open to the idea of a voluntary system, as long as such a system results in a high participation rate and can be achieved quickly. UH-GEMI believes that the onus for creating a voluntary system quickly rests on the industry, and that absent a credible voluntary effort to induce reporting that materializes in the very near future, FERC should seriously consider a mandate within the scope of its jurisdictional authority. Indeed, UH-GEMI believes that a voluntary effort is far more likely to succeed if market participants know that data

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² It should also be noted that even if data provision is not mandated, there should be rules governing the procedures and conduct of those who do submit data. In particular, it is essential that any part that submits data be required to submit <u>all</u> of its trades; "cherry picking"—submitting only a portion of trades—will (a) reduce the number of matched trades, and (b) bias indices.

³ Although GovPx, which collects and disseminates prices on government securities transactions, is a private initiative, it was formed in response to pressure from the SEC, the Federal Reserve, the Treasury Department, and Congress to improve price transparency in the government securities market.

reporting will be mandated unless they produce a credible voluntary system that achieves a very high participation rate.⁴

Legislation that specifically mandates price reporting has some virtues. First, a legislative mandate is likely to cover a wider array of market participants. This would increase the potential for matches, leading to more accurate data, deeper indices, and superior ability to measure market liquidity and depth. Second, a legislative mandate may be less susceptible to legal challenge.

The issue of a mandate intersects with another question raised in the Staff Paper. Specifically, as noted above, there is a fundamental connection between mandated data provision and FERC access to information stored in the data hub. If FERC (or other Federal regulators) has access to the hub data, companies may be reluctant to provide data to the hub voluntarily. Thus, if FERC views access to data collected by a separate (i.e., non-FERC) entity as essential to its conduct of market oversight, it may be required to mandate participation or run the risk that very few market participants provide transaction data.

3. Counterparty Information. As UH-GEMI has noted repeatedly, matching of buys and sells is essential to creating an accurate database of transaction prices. In our opinion, reporting of counterparty information will greatly enhance the accuracy of the matching process; accurate matching is virtually impossible without buy-

⁴ GovPx also indicates the fragility of private solutions. GovPx never had 100 percent coverage of

government securities transactions because (a) it only captures transactions that go through interdealer brokers (which represents a large portion, but not all, transactions), and (b) one of the largest interdealer brokers, Cantor Fitzgerald, does not participate in GovPX. Moreover, as a result of technological change and consolidation in the interdealer broker market, GovPx's share of transactions in notes and bonds has fallen dramatically. Although the quantity of transactions captured by GovPx is still large due to the immensity of the government securities market, such a decline in coverage in a less liquid market (such as energy) would seriously compromise the quality of price data produced by a data hub.

sell indicators. Moreover, reporting of counterparty information will greatly facilitate the reconciliation of "out-trades." When two parties submit data that indicate that they have traded with one another, but which does not match exactly, it is possible to contact both parties to reconcile the disparities. When parties submit only price, quantity, and perhaps buy/sell, but do not disclose counterparty, (a) it is more difficult to identify mismatches, and (b) it is impossible to contact both parties in order to reconcile the differences. This will make the reconciliation process more cumbersome, and less likely to result in a matched trade that can be disseminated to the marketplace with confidence that it is a bona fide transaction.

We understand the commercial sensitivity of counterparty data. However, we also know that it is possible for a central data hub to implement legal, technological, operational, procedural, and personnel-related security procedures that will vigorously protect the confidentiality of this information. Indeed, we have proposed that data providers and the data hub should enter into legal agreements stipulating that counterparty data will remain confidential, and have investigated technological and procedural methods to protect confidentiality.

Moreover, since the function of the data hub is limited to the collection and dissemination of accurate price and volume data, it has no competing commercial motive (such as newsgathering or the marketing of other services) to utilize counterparty data for other purposes. Thus, in our opinion, industry participants should be highly confident that confidential counterparty information will remain confidential within an independent data hub.

4. External audit. UH-GEMI believes that an external audit is essential to ensuring the accuracy of market data collected and disseminated. This is a vital part of the process of ensuring the industry's confidence in the accuracy of the data. Moreover, external audit is an essential way of ensuring the industry's confidence in the integrity of the data collection and dissemination process, and in the confidentiality of commercially sensitive information.

In our opinion, an internal audit is a very imperfect substitute for an external one. With respect to cost, it is important to remember that you get what you pay for. Internal audits are not free (although the true cost thereof may be difficult to ascertain), and an audit of a given quality should cost pretty much the same, regardless of whether it is internal or external. External audit has the decided advantages of greater transparency and independence. Independence is of particular importance in this context, as data collection organizations that engage in other activities may face internal conflicts that impair the internal auditing process.

UH-GEMI also believes that the principal of independence must extend to more than just the audit function. To restore credibility to the price reporting process, the data hub, its processes, and output must be—and perceived to be—independent from undue influence from market participants with a stake in the price data. Moreover, independence will ensure that the data hub will not be exploited to tilt the competitive playing field in favor of any interest in the marketplace.

Independent governance—combined with non-profit organizational form—are essential to achieving the required neutrality. Consequently, UH-GEMI recommends that the data hub have a two-tiered governance structure with a completely independent board of directors and industry advisory committees that provide information to the board, but have no control rights. In our opinion, such a structure provides the right balance between independence and informed decision making.⁵

5. Authorization of Price Reporting Entities. At the very least, it would be advisable for FERC to establish criteria that a data collection and reporting entities must meet. FERC should also recognize, however, that the fundamental economics of the data collection and dissemination process are likely to result in consolidation of this function into a small number of entities, and most likely into a single entity, even if multiple ones are initially authorized. Moreover, authorization of multiple entities at the outset will likely inflate costs, especially the costs incurred by data providers. The existence of multiple data hubs also compromises data quality. Given a level of data provider participation, a single hub can match (and hence verify) no fewer trades, and almost certainly match more trades, than multiple hubs. Fragmentation runs the very serious risk that none of the multiple hubs can produce reliable price data.

FERC therefore should consider establishing (a) a competitive process for selecting a single entity at the beginning of the process, and (b) a process for

⁵ An alternative is stakeholder governance in which interested parties have control rights (exercised through board representation). Stakeholder governance has raised concerns in financial SROS and quasi-regulatory bodies such as FASB. Indeed, in light of such concerns, the Chairman of the SEC, William Donaldson, recently called for a thorough reconsideration of governance at securities market SROs, such as the NYSE.

replacing the entity in the future. Even if it decides to permit competition between multiple data collection and dissemination entities, FERC should recognize the likely outcome of this competitive process and implement regulatory requirements and safeguards that ensure that a monopoly data hub will not exercise market power, or engage in practices that tilt the competitive playing field. The experience of the SEC in dealing with similar problems in securities markets can assist FERC in anticipating them, and in devising efficient responses to them.

6. <u>Delegation of Regulatory Functions</u>. A data hub can certainly perform certain regulatory functions. In particular, an appropriately automated data hub can readily implement certain surveillance activities that would generate "exception reports" (based on criteria developed in conjunction with FERC) that would assist in the identification of possible illegal activities or problematic market situations.

SROs in securities and commodity markets engage in a far wider array of regulatory activities. Indeed, many important enforcement activities are delegated to securities and commodity markets that operate under government oversight to ensure that they are carrying out their regulatory obligations.

When creating the regulatory structure in commodities markets in the 1920s and securities markets in the 1930s, Congress created this regulatory hierarchy in large part because there were exchanges in existence that already regulated some of the activities of their members. There is no existing analog in the OTC energy markets to which FERC can delegate some regulatory responsibilities. Therefore, although it may be advisable to contemplate the

desirability of creating and authorizing a "full service" SRO in the OTC energy markets (analogous to NASD in the securities markets or the exchanges), it must be recognized that this will be a time consuming process. Current problems in price reporting can be addressed much more rapidly—as is essential—by creating a data hub with very narrow responsibilities. The activities of the hub could be integrated with, or perhaps absorbed by, a broader self-regulatory organization created at a future date.

- 7. Near Term and Long Term Effectiveness. The data hub can be made operational in relatively short order because it can utilize existing technologies and protocols. The main impediment to the operation of a data hub is securing adequate participation of industry participants (see the comments at _ above)—and this is a problem that any price reporting system must confront. Given that in our opinion the data hub offers the greatest potential for long-term effectiveness, and can be available in a reasonable time frame, it is our further opinion that it would be advisable for FERC to move to the right long term solution as quickly as possible, rather than deferring its implementation and muddling through by repairing the existing system. Although such repairs may address some of the most egregious problems of the past, they cannot create a system that offers the cost, quality, independence, and transparency advantages of a single, independent data hub.
- 8. <u>Cost</u>. The Staff Paper states that "[t]he current system provides the service to the industry at moderate cost as part of the index providers' businesses" and asserts that an independent data hub may be disadvantaged by "the potential for significant costs." Several comments must be made in this regard.

First, industry participants may find reason to question whether the costs of the existing system are indeed moderate. Even if the collection costs are moderate, many market participants believe that the price they pay for the data thus collected are not so moderate.

Second, and relatedly, it is important to incorporate the costs that data providers incur to report data into any analysis of the economics of alternative price reporting systems. In the opinion of UH-GEMI, a single data hub is the most economical way for data providers to report data. Multiple connections inflate operational and legal costs of reporting data. Moreover, multiple connections impede the matching process and thereby compromise the quality of the data collected and disseminated.

Third, as noted before, you get what you pay for. UH is committed to devising the most economical means of collecting transaction data from market participants, matching that data in order to verify accuracy, auditing the data and the process to provide assurance of the quality of the data and the security of the process, and disseminating that data to the marketplace. In our opinion, any "cheaper" solution is likely to be decidedly inferior in terms of data accuracy or the transparency, neutrality, and independence of the collection and dissemination process.

In sum, when all costs are considered, and when accuracy, independence, neutrality, and transparency are properly incorporated into the analysis, UH-GEMI believes that the single data hub is the most efficient solution to the

industry's current price reporting problems. In our opinion, alternative models that tout low cost are in fact offering false economies.

9. Applicability to Electricity. The single data hub model is scalable and "scopeable." That is, the basic processes and technology are directly applicable to both electricity and gas. Once the cost to create the data hub has been sunk, it will be much less expensive to expand the scope of its product coverage.

The desirability of such an expansion depends in part upon the structure of the relevant electricity market. An electricity market with a centralized day ahead and/or real time market has little need for a data hub to collect and disseminate the prices determined in these markets. However, inasmuch as most ISO/RTO markets presently do not cover term products (i.e., contracts with greater than a day to delivery) the data hub can provide an effective means for collecting and disseminating forward and swap prices.

10. <u>Criteria</u>. UH-GEMI believes that an independent data hub is the most effective way of achieving the criteria of confidentiality, completeness, transparency, verifiability, and accessibility set out in the Staff Paper. We would especially emphasize that the Staff Paper's recommendation that "buy-sell matching" be the centerpiece of measures to control quality is particularly important and proper; we further emphasize that a single data hub is the most effective way to match transactions.⁶

We believe that the independent data hub offers other advantages in addition to those set out in the Staff Paper criteria. In particular, the independence

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⁶ The data hub can also accept matched trade data from other matching services, such as confirmation or clearing services. Relying on such "aggregators" of trade information to provide data to the hub offers the potential to reduce substantially the costs that market participants incur to submit data to the hub.

and neutrality of a data hub will enhance industry confidence that its operations and the data it produces are reliable, and that the data collection and dissemination entity will promote a competitive playing field in the OTC energy market. Moreover, the data hub is the most cost effective way to match transactions—and matching is the key to providing accurate data and deterring attempts to submit fraudulent data. Furthermore, the focus of an independent data hub, and the adoption of an independent governance structure and non-profit organizational form will provide strong incentives for the data hub to maintain quality. Finally, an independent data hub that disseminates data to all responsible index publishers and data vendors will encourage competition between them to produce high quality indices and value-added data products.

The subject of accessibility requires further comment. It has been argued that price data collected by a data hub or index publisher should be utilized solely for the purpose of compiling price indices. We strongly disagree. The widespread availability of transaction-level data has provided numerous benefits to market participants in financial and commodity markets. Such data has permitted the development of better market and risk management analytics in both commodity and financial markets. The energy industry could benefit greatly from the development of improved risk management analytics in particular. Moreover, such data has permitted customers in financial and commodity markets to evaluate the performance of their agents in securing best execution of transactions, and has improved the ability of market participants to evaluate the skill and performance of their traders.

Open access to data would by no means compromise the confidentiality and security of commercially sensitive data, such as counterparty information. A NASD quick perusal of sites related the Trace web to system (www.nasdbondinfo.com) the MSRB's reporting or system (ww1.msrb.org/MSRB/TSRweb.trs.asp) shows that data originally collected including counterparty and buy/sell information can be disseminated broadly and openly without this information on a transaction-by-transaction basis.

In brief, the widespread availability of high-quality, transaction level ("tick") data has provided tremendous benefits for the financial and commodities markets. The energy industry could similarly benefit from the availability of such data for cash energy commodities, and we have heard no compelling arguments that use of such information for purposes other than index construction would be detrimental.