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By Federal Express

Scott Alvarez, Esq.
General Counsel
Board of Governors of the Federal Reserve System
20th and C Streets, N.W.
Washington, D.C. 20551

Dear Mr. Alvarez:

On behalf of certain financial holding companies which are the parent companies of certain members of The Clearing House Association and other interested institutions (collectively, the “FHCs”),¹ we are writing to respond to questions of the staff of the Board of Governors of the Federal Reserve System (the “Board”) concerning tolling agreements. The staff’s questions appear in bold below.

I. Introduction

As discussed in greater detail in this letter, a “tolling agreement” is a formal arrangement between two parties in which one of the parties, the owner/operator (the “Seller”) of an electric generating plant (the “Facility”), agrees, for a negotiated fee, to give the other party (the “Buyer”) an option to purchase electricity (and in certain cases other products related to electricity) generated by the Facility. A tolling agreement differs from a typical power purchase agreement between an unrelated Buyer and Seller when the Seller is the owner/operator of a Facility in that the Buyer under a tolling agreement assumes the price and market risk on the underlying fuel used by the Facility to generate electricity.² Thus, although the Seller continues to have sole responsibility for the management and operation of the Facility, in a typical tolling

¹ The FHCs are: Citigroup Inc., Deutsche Bank AG, JPMorgan Chase & Co., UBS AG and Barclays Bank PLC.

² While the underlying fuel is often natural gas, depending on the characteristics of the Facility, the underlying fuel could be another energy-based product that is used to generate electricity, including, e.g., oil or coal.

agreement the Seller transfers to the Buyer the financial risk related to the price and availability of fuel used to generate electricity from the Facility. Under both types of agreements, the Buyer bears the financial risk related to the market price and demand for such electricity so produced.

It is also important to note that a tolling agreement is not the same thing as an “energy management agreement”, although they are sometimes seen in tandem. The phrase “energy management agreement” typically refers to a contract under which the Buyer, often an energy trader with deep and sophisticated knowledge of the trading and commodity markets, agrees to perform specified services incident to the production, sale and purchase of electricity for the Seller. Under an energy management agreement, the Buyer is explicitly acting as an agent for the Seller. No such agency relationship exists under a tolling arrangement.

In considering the permissibility of tolling agreements for FHCs, it is important to understand that each individual activity contracted to be undertaken in a tolling agreement is an otherwise permissible activity for FHCs. Specifically, in their regular energy commodity trading businesses FHCs: (i) purchase and take title to (and in certain cases, store) fuel used to produce electricity, (ii) enter into agreements for the transportation of fuel, (iii) enter into options to purchase electricity, (iv) take title to electricity and (v) enter into agreements for the transmission and sale of electricity.

A tolling agreement does not constitute and is not viewed as a transfer of control or ownership of the Facility and, under all circumstances, the Seller continues to have sole responsibility for the management and operation of the Facility. Specifically, all decisions regarding the actual operations of the Facility remain the ultimate responsibility of the Seller, and the Seller is obligated to operate and maintain the Facility in accordance with all applicable laws and Prudent Utility Practices.³ Under no circumstances does the Buyer assume responsibility for, or control over, the operation, management or ownership of the Facility or the related pipelines and transmission facilities required to deliver and receive the underlying fuel and electricity.

Tolling agreements are an integral part of the energy market and one of several types of agreements the energy market demands in order to, among other things, provide sources of electricity supply to Buyers and financial risk management products to Sellers. Without the

³ “Prudent Utility Practice” is a utility industry term of art and a typical definition generally contemplates wording along the lines of: the practices, methods and acts that, in the exercise of reasonable judgment, in light of the facts, including but not limited to, the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry prior thereto, known at the time the decision was made, would have been expected to accomplish the desired result consistent with cost-effectiveness, reliability, safety, and expedition. When used as a defined term in an agreement, “Prudent Utility Practice” is typically not intended to be limited to optimum practice, method, or act to the exclusion of all others, but rather is a spectrum of possible practices, methods or act which could have been expected to accomplish the desired result at the lowest reasonable cost consistent with cost-effectiveness, reliability, safety and expedition.

ability to enter into tolling agreements, FHCs are at a significant competitive disadvantage to their competitors in significant parts of the energy market.

In the discussion that follows, we address each of the specific questions posed by the staff of the Board concerning tolling agreements. To avoid unnecessary duplication in our responses and to facilitate the discussion, we have reordered the questions. We start with the response to Question No. 4.

II. Question No. 4: Describe energy tolling contracts, including any significant ISDA (or other) Master Agreement provisions, in layman's language and in a non-technical form.

A. General

As described earlier, a tolling agreement is a power purchase agreement pursuant to which the Buyer makes a fixed payment (also referred to as a "capacity payment") to the Seller for the right to call on the Facility to generate electricity at a pre-determined ratio of fuel input to electricity output, which is referred to in the industry as the "heat rate." In reality, it is simply a call option tailored to the characteristics of a particular Facility. For example, if a Facility's heat rate is 7 Million British Thermal Units per MWh, notated as "MMBtu/MWh", it means that it will take 7 MMBtu's of gas to generate 1 MWh of electricity.

A typical toll is structured in one of two ways, so that when the Buyer elects to exercise its option to purchase electricity, it can either: (1) provide the fuel directly to the Facility (using the example above, if the Buyer elects to exercise its option to purchase 1 MWh of electricity, it will cause to be delivered to the Facility 7 MMBtu's of gas) or (2) compensate the Seller for fuel the Seller has acquired at the pre-determined heat rate. Again using the above example, if the Buyer elects to exercise its option to purchase 1 MWh of electricity, it will pay the Seller for 7 MMBtu's of gas at the spot market price. By structuring the transaction in this way, the Seller still procures the fuel but does not take fuel price risk as the Buyer is reimbursing the Seller for the fuel at the spot market price. Regardless of whether the Buyer actually exercises its option to purchase electricity, the Buyer still pays the Seller a fixed capacity payment.

In addition, the Buyer typically pays the Seller a relatively small variable payment to cover some non-fuel variable operating costs incurred in the production of electricity. These charges are known as variable operation and maintenance ("VOM") payments and start charges.

The Buyer typically takes physical delivery of the electricity produced by the Seller at the Facility's outgoing electricity meter, although sometimes delivery is required to be made at the nearest liquid market hub.⁴ If the Buyer is providing the fuel, the Buyer is

⁴ Many tolls are structured such that the Seller may utilize any physical or contractual resources at its disposal in order to satisfy its contractual obligations. For example, if the Seller prefers not to generate electricity when the Buyer exercises its option, and instead desires to provide replacement power to the Buyer according to the same terms that are in the toll, it can usually do so.

responsible for arranging to provide the fuel to the Facility's fuel meter and for paying for any fuel transportation charges incurred to deliver the fuel to the Facility.

Finally, the Seller may also seek to sell other related electricity products that are available from a Facility, including Ancillary Services.⁵ The costs for these products, if sold to the Buyer, are typically embedded in the capacity payment to the Seller. However, these services are sometimes sold directly by the Seller to a third party.

Energy tolling agreements are varied in form and manner of documentation. Historically, tolling agreements were documented on a one-off basis, not under a master agreement, and were subject to extensive individual negotiations. More recently, tolling agreements are being documented under an Edison Electric Institute (EEI) Master Agreement and/or a one-off agreement similar in form to the EEI or an ISDA with a Power Annex.⁶

B. Common Provisions in a Tolling Agreement

1. General Contract Relationship. Most tolling agreements contain such customary representations and warranties, covenants, events of default, calculation of damages for non-performance and dispute resolution as are typically found in an ISDA or EEI Master Agreement, although in some instances the events of default may be more limited and/or have longer cure periods and, in some cases, the damages payment that may be payable upon termination may not be express and/or may be expressly limited to one-way payments (i.e., the defaulting party to the contract is not entitled to collect a termination payment). In addition to these general provisions, some tolling agreements, particularly longer-term agreements, may address other issues such as changes in laws, new taxes, change in ownership of the plant, catastrophic loss of the plant, indemnification, insurance and inspection rights. Each tolling agreement will also address credit-related concerns (that is, the financial wherewithal of the parties to perform their obligations under the agreement), traditionally either through guarantees, letters of credit, mark-to-market margining and/or the granting of a security interest in defined collateral.
2. Responsibilities of the Seller. The Seller is typically contractually obligated to retain all the risk of operating the Facility. However, frequently the Buyer and Seller will

⁵ The term Ancillary Services refers to a collection of secondary products typically sold to transmission system operators to help maintain the reliability and proper functioning of the grid. For example, transmission system operators are required to have some amount of non-operating generation standing by in case an operating generator goes offline. This is called a "reserve" service. If a generator is uneconomic to operate because of high operating costs, it still can earn revenue by selling "reserve" service to the transmission system operator.

⁶ For reference, a draft sample form of confirmation for a proposed tolling transaction under an EEI Agreement is attached hereto as Exhibit A. Please note that this draft confirmation was provided by a "Seller" in a tolling transaction and is indicative of what market participants would request of a "Buyer." However, the parties would expect for there to be substantive and substantial negotiations of contract terms.

agree in the contract that the Seller will be excused from delivering electricity to the Buyer for defined reasons such as force majeure events and/or unplanned outages. Examples of the Seller's obligations include the following terms (while these provisions may not be explicitly included in all tolling agreements, they are implicit because all tolling agreements contain provisions requiring the Seller to comply with applicable laws and safety and reliability rules):

3. Licensing of Unit. The Seller is responsible for acquiring and maintaining all permits, licenses, certifications and approvals necessary for the construction, operation and maintenance of the Facility.
4. Operation, Maintenance and Repairs. The Seller is required to operate and maintain the Facility in accordance with Prudent Utility Practice. Generating units generally require a week or so of maintenance every year, and 4+ weeks of maintenance every 3-4 years for major overhauls. Annual maintenance schedules are usually required to be provided to the local Transmission System Operator ("TSO")⁷ during the fall of the previous year, (e.g., 2007 schedules would be expected to have been provided by November 2006 in one example⁸) and are subject to approval from the TSO. Maintenance outages may not be taken during peak seasons (summer, winter), and are usually scheduled during the spring or fall, when electricity demand levels are low

⁷ The term Transmission System Operator (referred to here in as a "TSO") generically refers to the entity that (i) is managing the operation of high voltage transmission facilities in a specific service territory and (ii) is charged with monitoring and ensuring the reliability of the local electrical grid. The TSO may or may not "own" or "operate" (as in line maintenance) the transmission facilities subject to its management authority. In some parts of the country, "independent system operators" ("ISOs") or "regional transmission organizations" ("RTOs") have been formed to serve as the TSO with respect to transmission facilities owned by one or more other persons and covering a broader region. TSOs, ISOs and RTOs are each themselves subject to additional governmental regulation as well as rules and regulations of the North American Electric Reliability Council ("NERC"). In this letter, we will refer generally to TSOs.

A complete discussion of the history of NERC and its policies and rules is beyond the scope of this letter. Information concerning NERC and its procedures and operations can be found at <http://www.nerc.com/>. In general, "NERC's mission is to improve the reliability and security of the bulk power system in North America. To achieve that, NERC develops and enforces reliability standards; monitors the bulk power system; assesses future adequacy; audits owners, operators, and users for preparedness; and educates and trains industry personnel. NERC is a self-regulatory organization that relies on the diverse and collective expertise of industry participants." NERC is subject to oversight by the Federal Energy Regulatory Commission and governmental authorities in Canada.

Any Facility that seeks to interconnect with the local electrical grid must enter into a generator interconnection agreement with the applicable TSO. This separate agreement governs the relationship between the Facility and the TSO, including with respect to the primacy of safety and reliability rules. Each TSO has a standard form agreement for this purpose.

⁸ From California Independent System Operator Tariff Section 9.3.6: "Each Operator shall, by not later than October 15 of each year, provide the ISO with a proposed schedule of all Maintenance Outages it wishes to undertake the following year."

and excess supply typically exists. Maintenance outages can only be rescheduled upon explicit approval of the TSO. Prior to submitting the maintenance schedule to the TSO, the Seller is typically required to inform the Buyer of the plan for scheduled maintenance for the following year. Some tolling agreements contain provisions that allow the Buyer to request changes to the maintenance schedule, if possible, but the final decision as to the timing of an outage for maintenance is between the Seller and the TSO, and the Buyer has no way to compel or restrict if and when maintenance/repairs are scheduled.⁹

5. National and Local Electricity Reliability Organizations. Both the North American Electric Reliability Council (“NERC”) and the local TSO require an owner of a Facility to execute an interconnection agreement that provides for how the Facility will operate and interact with the local electrical grid in a manner that maintains safety and reliability. These arrangements require the Seller to operate the Facility and to generate electricity in accordance with all laws and regulations, including applicable safety and reliability rules of NERC and the TSO.
6. Responding to TSO Instructions. The TSO is the ultimate authority with respect to whether the Facility will be operated regardless of any separate contractual arrangement between the Buyer and the Seller. To the extent that the TSO transmits an instruction that causes the Facility to operate differently, or produce electricity in different amounts, than indicated by the Buyer, contractual provisions are in place to allocate the extra revenues and costs among the Seller, the Buyer and the TSO. There are two types of instructions provided directly to the Seller from the TSO: (i) forward calls to increase or decrease generation, or (ii) real-time calls to increase or decrease generation:
 - a) Forward Calls: In order to economically operate the transmission system, or to maintain reliability, such as eliminating overloads, the TSO has the right to require a Seller to increase or decrease generation ahead of time. Compensation for this service is provided to the Seller directly from the TSO.
 - b) Real-Time Calls: In many cases, the Seller is directly connected to the control room of the TSO. The TSO has the ability to remotely control the Seller’s production levels if necessary to maintain the safety and reliability of the local electrical grid.
7. Environmental Liabilities and Costs. The Seller is solely responsible for compliance with environmental laws and regulations as well as environmental liabilities and costs with respect to the Facility, including decommissioning costs, because the Seller is

⁹ These provisions are not unique to tolling agreements. Similar provisions are also found in power purchase agreements. The Seller often agrees to fairly broad provisions regarding scheduling of planned maintenance outages (in part because the Seller is obligated to inform the local TSO of such outages for reliability purposes).

the owner/operator of the Facility. In addition, the Buyer may require that the tolling agreement include an environmental indemnity from the Seller. In certain limited circumstances, however, the Buyer may agree to reimburse the Seller for costs incurred to purchase necessary emissions allowances to operate the Facility.

- C. Responsibilities of the Buyer. The Buyer is typically contractually obligated to bear all the financial risk related to (i) electricity after delivery from the Seller to the Buyer, and (ii) fuel prior to the delivery to the Seller, if the contract is structured such that the Buyer is responsible for providing the fuel. A summary of the Buyer's obligations is set forth below but, importantly, these obligations are not materially different from those assumed in standard fuel and other energy commodity trading transactions routinely conducted by market participants — including the FHCs — in the energy commodity trading marketplace.
1. Fuel Arrangements. If the Buyer exercises its option to purchase electricity generated by the Facility, the Buyer is typically required either to provide for the delivery of fuel to the Facility, including pipeline transportation charges, or to reimburse the Seller for fuel used by the Facility at the spot market price. When the Buyer is responsible for arranging for the delivery of the fuel, the Seller still has responsibility for the fuel once it is inside the Facility.
 2. Electricity Arrangements. When the Buyer sells the electricity to a third party, either the Buyer or the third party is responsible for arranging and paying for any necessary electric transmission service.
 3. Market-Based Rate Authority. In order to make sales of electricity produced by the Facility at market-based rates, the Buyer must hold appropriate “market-based rate authority” from the Federal Energy Regulatory Commission (“FERC”). This authority is obtained by the Buyer upon application to FERC and following a determination by FERC (among other issues FERC considers) that the Buyer does not possess “market power” taking into account the current tolling arrangement. As discussed in the response to Question No. 6, as a condition of holding and exercising market-based rate authority, the Buyer will become a “public utility” under the Federal Power Act and is subject to applicable FERC regulation and rules.¹⁰
 4. What the Buyer Cannot Require. Beyond exercising its option to purchase electricity generated by the Facility, tolling agreements do not allow the Buyer to direct or make decisions regarding the operation of the Facility or the conduct of the Seller's business; for instance, the Buyer may not require the Seller to hire or fire employees, nor may the Buyer dictate capital improvements. The Seller may choose to make capital improvements to increase the Facility's efficiency or output level and thereby

¹⁰ All of the FHCs currently hold market-based rate authority granted by FERC (either directly or through wholly-owned subsidiaries).

increase the profitability of the Facility, but that is a decision left to the Seller based on its own economics.

D. Payments under a Tolling Agreement.

1. Capacity Payment. A capacity payment (also known as a “demand charge”) is a fixed payment that typically covers the Seller’s invested and going forward capital costs of the Facility. In financial terms, this payment is the equivalent of an “option premium” on the agreed capacity of the Facility to produce a given quantity of electricity from a given amount of fuel. The capacity payment will be reduced, according to a formula negotiated between the Buyer and the Seller and set forth in the contract, if:
 - a) regardless of cause, the Facility is not available for electricity production for the contractually agreed amount of time; or
 - b) the Facility is using more fuel per megawatt hour of production than is provided for in the contract.
2. Fuel Payment, if Structured so that Seller Procures Fuel. If the contract is structured such that the Seller procures the fuel and the Buyer reimburses the Seller for fuel used in the generation of electricity at the spot market price, the Seller will make a payment to Seller based on the pre-agreed Heat Rate. (e.g. using the example from above, if the Seller requested 1 MWh of generation, the Buyer will reimburse the Seller for 7 MMBtu’s of gas)
3. Variable Operations and Maintenance (VOM) Payment. If the Buyer exercises its option to purchase electricity generated by the Facility, the Buyer typically pays the Seller a variable (\$/MWh) charge to cover the Facility’s variable operation and maintenance expenses. (e.g., water use, chemicals used during production, variable labor costs, etc.).
4. Start-Up Payment. If the Buyer exercises its option to purchase electricity generated by the Facility, the Buyer also typically pays the Seller a fixed (relatively small) payment as part of the option strike price when the Facility is being “ramped up” to produce electricity.
5. Guaranteed Heat Rate or Availability Guarantees. Typically, the Seller guarantees to produce a certain amount of electricity in exchange for a given amount of fuel that is provided by the Buyer. The Seller may also agree to provide minimum amounts of electricity for defined period(s) of time. If the Seller does not meet the minimum contractual requirements set forth in the Agreement, the capacity payment to the Seller typically will be reduced.

6. **Bonus Payments.** In certain tolling agreements, the Seller and the Buyer may agree to additional payments to the Seller if the Seller is able to increase the efficiency and/or output of the Facility.

III. Questions Nos. 2 and 3: **Provide a detailed, step-by-step description of a tolling transaction (e.g., how is the fuel delivered, when is a hedge effected, when is electricity purchased, etc.).**

AND

When a toller acquires an energy input, how and when does it hedge the transaction?

In responding to Questions Nos. 2 and 3 above, it is important to recognize that, from the point of view of an FHC, tolling agreements are evaluated and administered similarly to any other call option on electricity which are customary transactions in any energy trading commodity portfolio. As discussed throughout this letter, tolling agreements are essentially call options with a strike price equal to the ratio of (i) fuel input to (ii) electricity output.

An FHC's existing energy commodity trading infrastructure, including risk controls, are used to value and manage the risks associated with tolling agreements and/or their constituent components with minor supplements to its information systems, settlement and accounting functions.

<i>Assumptions Used for Example to Follow</i>	
Today's Date	March 13, 2007
Contract Term	June 1, 2007 – May 31, 2009
Contract Capacity	100 Megawatts (MW, enough to light ~100,000 houses)
Strike Price (Heat Rate)	7 MMBtu/MWh (the ratio of how much gas ¹¹ the generating unit burns to generate 1 MWh of electricity)
Variable O&M	\$1/MWh
Gas Price Forecast	\$10/MMBtu
Electricity Price Forecast	\$80/MWh
Location	California, and interconnected with the California ISO grid

A. Valuation of a Tolling Agreement

Tolling agreements are valued almost exactly the same way that financial call options for electricity are currently valued, with one additional piece: the Buyer also assumes the risk for the price fluctuations of the underlying fuel (a risk which it manages as part of the

¹¹ For purposes of this specific example, the fuel is assumed to be natural gas.

management of its overall energy commodity trading portfolio). In addition, the Buyer may also be acquiring Ancillary Services from the Facility, and if so, would be required to value those products either by reference to the value established by the local TSO and/or market prices.

1. Pieces of the value in a tolling agreement may include:

- a) Intrinsic Value: The value of the tolling agreement with the contract strike price (heat rate) at the expected market prices. The intrinsic value is the forward market price for electricity, less the variable costs of operating the Facility (i.e., the “margin”).
- b) Optionality Value: The value derived from being able to exercise the option to purchase electricity at the pre-determined strike price in markets that have price volatility. For example, if electricity prices rise significantly higher than expected, the Buyer has the opportunity for the upside revenues. Alternatively, if electricity prices are low, the Buyer has a choice not to exercise its option to purchase electricity, but instead to buy electricity from the market. The optionality value is determined in a manner similar to that for other financial derivatives, such as puts and calls.
- c) Ancillary Services Value: The value derived from the acquisition of Ancillary Services that can be sold to the TSO and/or to third parties. These values are usually small relative to the other aspects of the transaction.

2. Intrinsic Value. Key inputs into determining the intrinsic value are:

- a) Strike Price: The ratio of fuel (in this example, gas) input to electricity output.
- b) Gas Price Forecast: The gas price forecast is multiplied by the strike price (heat rate) to determine the cost/MWh of fuel used to produce electricity. For example, if the gas price forecast is \$10/MMBtu, and the strike price is 7 BTU/kWh, it will cost:

$$\text{\$10/MMBtu} * 7 \text{ MMBtu/MWh} = \text{\$70/MWh to generate electricity.}$$

- c) Variable Operation and Maintenance (VOM) Costs: The VOM costs are added to the fuel costs in order to determine the total cost to the Buyer of the exercise of its option to purchase electricity under the tolling agreement.

$$\text{\$70/MWh} + \text{\$1/MWh} = \text{\$71/MWh}$$

- d) Electricity Price Forecast: The electricity price forecast is compared to the Buyer’s variable cost of production (fuel cost + O&M cost) to determine the “Intrinsic Value” (as defined above). For example, if the electricity price forecast is \$80/MWh, the Intrinsic Value of the tolling deal is:

$$\$80/\text{MWh} - \$71/\text{MWh} = \$9/\text{MWh} = \text{Intrinsic Value of the Deal}$$

3. Optionality Value. The key input for determining the Optionality Value is the historic electricity and underlying fuel price volatility and the correlation of the two products. In fact, a fairly standard Black-Scholes type option valuation model is typically used to determine the Optionality Value. Higher volatility translates into a higher Optionality Value.
4. Ancillary Services Value. The key input for determining the Ancillary Services Value is historical prices and/or future regulatory requirements. While relatively small in relation to the value of electricity, the historic value of Ancillary Services (i.e., the price paid by the TSO for Ancillary Services over a preceding time period) is used to estimate the revenues that can be earned from sales of Ancillary Services.

The total value of the tolling arrangement is then calculated using the inputs, and is:

$$\text{Intrinsic Value} + \text{Optionality Value} + \text{Ancillary Services Value.}$$

B. Hedging the Transaction

The hedging strategy underlying a tolling agreement is no different than that of any other energy commodity position. There are a number of factors that would go into such a hedging strategy, including the likelihood of the transaction closing, the forward price for the underlying fuel, the forward price for electricity and the liquidity and volatility of the relevant markets. One strategy may be to hedge a significant amount of the Intrinsic Value immediately upon closing of the tolling agreement. This could be done by simultaneously entering into an obligation to buy, in the current example, gas at the forward price of \$10/MMBtu, and an obligation to sell electricity at the forward price of \$80/MWh. By doing this, the Buyer locks in:

$$\$80/\text{MWh} - \$70/\text{MWh} (\text{Fuel Cost}) - \$1/\text{MWh} (\text{O\&M Cost}) = \$9/\text{MWh}$$

Another strategy may be to hedge only pieces of the toll immediately by relying on the spot market for a period of time for either or both the fuel and electricity markets.

C. Exercising the Option — Delivering Fuel and Purchasing Power

Prior to the first day of delivery under the example contract, May 31, 2007, the Buyer will look at the forecasted market price for electricity for June 1, 2007, and will then decide whether the cost to the Buyer of purchasing electricity under the toll is higher or lower than the market price. If the market price is higher, the Buyer would exercise its option to purchase electricity under the tolling agreement. However, if the market price is lower, the Buyer will not exercise its option to purchase electricity from the Seller, and will instead purchase energy from the market to meet any forward contractual commitments it may have entered into. In this ongoing way, the Buyer is able to realize its Optionality Value in the tolling agreement. Typically, the notice from the Buyer to the Seller that the Buyer intends to exercise

its option under a tolling agreement is due by a certain time the day ahead, but one of the additional valuable options a Buyer may be able to purchase in a tolling agreement is the ability to exercise the option on far shorter notice, thereby allowing the Buyer to react more swiftly to changing market conditions.

If the Buyer exercises its option to purchase electricity generated by the Facility and is providing the fuel, the Buyer will purchase and schedule fuel, e.g., natural gas, for delivery to the Facility. Typically, gas is delivered to the Seller's gas meter. The Seller then operates the Facility to generate the electricity. The Seller will deliver the electricity to the electric meter located at the power plant, and ownership of the electricity changes hands at that point.

D. "Reliability Must Run" and "Must Offer" Obligations

Because of their location, certain electric generating plants need to operate in order for the TSO to maintain the safety and reliability of the local electrical grid. Consequently, many electric generating plants have separate contracts (Reliability Must Run contracts) directly with the TSO in a given region. These contracts allow the TSO to require a Facility subject to a tolling agreement to generate electricity, even if the Buyer has not exercised its option to purchase electricity generated by the Facility. If the TSO requests that the Seller operate the Facility, the TSO may arrange for fuel delivery, and often settles its account directly with the Seller.

IV. Question No. 1: **How will each component of a tolling transaction be accounted for on the troller's (i.e., the FHC's) books? What about energy management agreements?**

Accounting for a tolling agreement requires analyzing the individual transactions that make up a tolling agreement: (i) the obligations of the Buyer to make fixed payments and variable payments to the Seller, (ii) the sale of fuel to the Seller to be used in the operation of the Facility and (iii) the purchase of electricity generated at the Facility from the Seller. Different accounting principles are likely to apply to each of these components of the transaction. Some of our members are foreign banks, however, and they prepare their financial statements under International Financial Reporting Standards (IFRS). The IFRS requirements in this area are broadly consistent with those included in US GAAP, which are outlined below.

A. Accounting for Tolling Agreements

Generally, a tolling agreement will be accounted for as a derivative on the books of the FHCs under a mark-to-market method. To reach the conclusion that derivative accounting applies to a particular tolling agreement, however, an initial determination must be made that the tolling agreement is not subject to lease accounting. In each individual tolling transaction, this

initial determination almost always rules out the application of lease accounting to such transaction.¹²

The fact that a tolling agreement must first be analyzed as to whether it should be subject to lease accounting does not mean that the underlying contract is or resembles a lease, and should not be construed as creating any such implication. The fact that a specific tolling agreement may be “subject to lease accounting” means only that the methodology of lease accounting might apply, and does not mean that the tolling agreement provides any specific or minimum type or level of control over the related lease asset(s).¹³ In fact, FASB Statement 13, Paragraph 1, states that a contractual arrangement may be subject to lease accounting “even though substantial services by the contractor (lessor) may be called for in connection with the operation or maintenance of such assets.” In addition, accounting literature indicates that if a transaction meets both the lease accounting rules and derivative accounting rules, the transaction should be subject to lease accounting. Most tolling agreements, however, do not meet the lease accounting rules.

The accounting profession has devised a four-pronged test, pursuant to Issue 01-8 under FASB Statement 13, to determine whether lease accounting should apply to a contract. All four prongs of the test must be met for lease accounting to apply:

1. Does the contract have a period or term?

All tolling agreements will have a definite period or term specified in the contract and will clearly state the date upon which the tolling agreement commences and the date upon which it expires or terminates.

2. Does the contract, explicitly or implicitly, identify specific property, plant or equipment?

An asset is “explicitly” identified when the contract seller is obligated to use a specific asset to provide the goods or services requested by the purchaser. However, judgment is required to analyze whether an asset is “implicitly” identified. A tolling agreement may avoid implicit identification if the Seller of

¹² Energy management agreements undergo a similar analysis, typically with the same result.

¹³ This is but one example of the terminology or nomenclature used or applied by a particular discipline (in this case, the accounting profession) suggesting an activity or a relationship that in fact is not an element of a typical tolling relationship. In this particular case, the possible application of “lease accounting” does not in and of itself mean that the tolling agreement displays any of the other elements of a traditional lease, including the element or degree of physical “control” over the Facility and its operations (*see* the further discussion below). The FHCs submit that in certain instances it will be necessary to look through certain “terms of art” in order to evaluate the substantive elements of these transactions against the applicable banking regulations and the concerns that the Board has traditionally expressed regarding these transactions, and taking care that these “terms of art” do not prejudice the analysis or dictate any particular conclusion.

electricity or products related to electricity has more than one asset that could be used to satisfy its obligations under the tolling agreement and it is economically feasible for the Seller to use those other assets to satisfy those obligations.

If the tolling agreement does not entitle the Buyer to the output of a specific Facility, or if capacity payments made to the Seller are not determined by reference to the costs of a specific Facility, then “specific property, plant or equipment” has not been identified.

Typically, however, a tolling agreement is likely to identify (explicitly or implicitly) the specific Facility to which the tolling agreement relates. Consequently, this prong of the four-pronged test is almost always met.

3. Does fulfillment of the arrangement depend upon use of the identified property, plant or equipment?

If the Buyer under the tolling agreement has the risks and rewards linked to electricity production from a specific identified Facility, then this prong of the test is met. However, if the Seller has the right and ability to meet its contract obligations in other ways (e.g., wheel electricity from another source to cover an exercise of the option by the Buyer, or the Seller pays liquidated damages rather than having the Buyer take the economic risks of the Facility’s failure to deliver electricity), then the fulfillment of the arrangement is not dependent upon “identified property, plant and equipment” and will not be subject to lease accounting.

This prong of the test is typically not met in the case of a tolling agreement and is often the factor that rules out the application of lease accounting to a tolling agreement. Although a tolling agreement may specify the specific Facility to which it relates, a failure on the part of the Seller to perform as required under the tolling agreement is almost always remedied by the payment of money damages or the delivery of electricity to the Buyer from an alternate source. Thus, fulfillment of the arrangement does not necessarily depend upon the use of identified property, plant or equipment. Importantly, from the perspective of the Buyer, the Buyer is never itself using the electricity, but rather is selling electricity to another person in an instantaneous title transfer transaction to a third party. Thus, if due to non-performance by the Seller (i.e., the Facility burns too much fuel), the Seller is unable to deliver the contractually specified volumes of electricity to the Buyer, and the Buyer’s cost of obtaining replacement electricity to sell to the Buyer’s buyer in an offsetting transaction increases such that the Buyer suffers a net loss, the tolling agreement will provide for the Seller to pay money damages (or suffer a reduction in the capacity payment) to cover the Seller’s contractual non-performance.

4. Does the Buyer have the right to control use of the property, plant or equipment?

For lease accounting purposes, this prong of the test may be met merely by having the option under the tolling agreement entitle the Buyer to a significant portion of a Facility's electricity output, whether or not the Buyer actually exercises any authority over how the property, plant or equipment is operated, managed, maintained or directed. Therefore, the test has nothing to do with actual "control" over, or management of, the plant. A tolling agreement may also meet this prong of the test if the Buyer is able to identify specific output to which it is entitled (for example, all output between 6 a.m. and 9 a.m. is specific identification of output, but a simple agreement to purchase 10 MW of power is not specific identification of output).

Other factors which may cause this prong of the test to be met are: (i) the Buyer may have a right of first refusal on any electricity generated beyond what exercise of the option otherwise would have given the Buyer, or (ii) the Seller has the right to sell excess power, but the location of the Facility or the economics of the Facility are such that it is not anticipated that any excess electricity will be generated.

In the ordinary course of the energy trading business, it would be expected that the FHCs would enter into tolling agreements that would meet this prong of the four-prong test. However, it is important to clarify that accounting guidance makes use of terminology that has one meaning under accounting rules and an entirely different meaning under bank regulations. A determination that an accountant might make indicating that the "right to control use of property" test is met, does not equal or suggest "control" in a bank regulatory sense. This distinction is clear from the fact that "control" for accounting purposes may result from the simple fact that the Buyer has an option on a significant percentage of the Facility's electricity output. In fact, as indicated above, this test could be met simply if the Buyer has a right to a specific and identifiable portion of the Facility's electricity output, even if that output is not significant.

In the unlikely event a tolling agreement is accounted for as a lease under the four-pronged test described above, then a determination must be made as to whether the tolling agreement should be treated as a "capital" lease or an "operating" lease pursuant to the accounting guidance.¹⁴ Typically, any tolling agreement that is subject to lease accounting is treated as an operating lease because the term of a typical tolling agreement is not long enough; *i.e.*, the term is not usually longer than 75% of the estimated economic life of the Facility. A typical tolling agreement is likely to be in place for about 3-7 years and the typical economic life of a Facility is much longer. Thus, to be treated as a capital lease a tolling agreement would first,

¹⁴ Again, the accounting terminology should not be read to suggest that the FHCs are making any capital investments in a particular facility, nor that they are in fact "operating" the Facility.

have to be subject to lease accounting and, second, likely have to run 20 years or more. Accordingly, the FHCs do not believe that they would be entering into any tolling agreement that would be accounted for as a capital lease.¹⁵

If in the unlikely event a tolling agreement is accounted for as an operating lease, the fixed payments made under the contract are amortized over the life of the toll and if the payments are uneven they are generally amortized under the straight line method. Variable payments are expensed if and when they are made.

B. Accounting for Purchase and Sale of Fuel Inputs

If the FHCs own fuel in inventory (such as natural gas in storage), then fuel is accounted for as lower-of-cost-or-market (LOCOM) while on their books. If fuel is acquired through a physically settled derivative and then on-sold to the Seller through a derivative, then derivative accounting will apply and FAS 133 indicates that the contracts will be marked to market. The FHCs could also purchase fuel on the spot market and, almost simultaneously, on-sell that fuel to the Seller, in which case there are no significant accounting issues.

C. Accounting for Purchase and Sale of Electricity Outputs

Although the same process described above for determining the applicability of lease accounting needs to be considered for electricity contracts, the vast majority of power purchase contracts we see are treated as derivatives for accounting (and other) purposes and, thus, are subject to derivative accounting. Under Statement 133, the FHCs anticipate marking to market all such contracts.

V. Question No. 5: **Discuss the various risks presented by tolling agreements on power and how they are managed. Also provide, if available, a description of the industry standard best practices for an energy trader engaged in tolling agreements.**

The primary risks associated with tolling agreements are: (1) the financial and economic risks associated with an option on electricity that may prove uneconomic at such time as the Buyer elects to exercise its option to purchase electricity (but the maximum financial exposure to this risk is the amount of the capacity payment and if the Buyer never exercises its option to purchase electricity, the only payment it makes to the Seller is the capacity payment), and (2) “unit contingent risk”, which is the risk that the Buyer sells the electricity it anticipates receiving from the Seller upon exercise of its option but the Seller is excused from delivering the electricity under the contract (e.g., an unplanned outage has occurred at the Facility) and thus the Buyer does not received the anticipated electricity from the Seller. If this occurs, the Seller in

¹⁵ The FHCs believe that given the dynamic nature of the energy markets (and the difficulty in predicting market conditions several years into the future), both plant owner/operators and FHCs would be reluctant to enter into extremely long-term commitments – owner/operators would be concerned about foregoing potential upside that would come from consistently higher market prices and FHCs would be concerned about being locked into unprofitable transactions in the event of a long-term market decline.

the toll typically does not pay market damages to the Buyer and the Buyer will need to buy other electricity in the spot market at a potentially higher price (it could also be lower). This “unit contingent” risk can be mitigated in a number of ways: First, tolling agreements provide for a reduction in the capacity payments to the Seller for non-performance. Second, unit-contingent risk may be mitigated by including “make-whole” provisions in the contract if the “make whole” amount the Seller must pay is the difference between the Buyer’s purchase price for electricity under the tolling agreement and the price the Buyer was required to pay for replacement electricity. The third way “unit contingent” risk is managed is that, in certain circumstances, unit outage insurance or other financial products are available to provide a hedge. These risks are exactly the types of risks that are already managed in the everyday business of energy commodity traders.

If the tolling agreement is structured such that the Buyer provides the fuel, the Buyer will also assume the risk that the Facility will not be able to produce electricity because the Buyer cannot deliver fuel to the Facility (whether due to unavailability of the underlying fuel or transport curtailments such that fuel cannot be delivered to the Facility).

There is no agreed set of “best practices” for energy traders that are specific to tolling agreements. In a particular situation, what is best ultimately depends upon what the Seller needs and requires in entering into the tolling agreement and the extent to which there is competitive demand for electricity from the Facility from tolling parties or others. To state the obvious, each party to a tolling agreement must make an independent evaluation of the risks and rewards of a given business situation and consider the appropriate contract terms, under those specific circumstances, that it is willing to accept. Again, however, it is important to recognize that the Buyer is viewing its exposure under any one particular tolling agreement as limited by the amount of the premium the Buyer is required to pay under the tolling agreement. That having been said, and as mentioned above, tolling agreements are essentially a combination and integration of several different transactions in which energy traders routinely engage (i.e., fuel sales transactions and electricity purchase transactions with embedded optionality), and the risks associated with tolling agreements are managed (i.e., commodity price risks, counterparty credit risks, force majeure risks) in the same manner as are the risks associated with all other similar energy commodity transactions. Accordingly, each Buyer brings to bear on tolling agreements all of the risk management controls and practices that are used by Buyers in the conduct of the energy commodity trading businesses generally.

VI. Question No. 6: With reference to the Enron/California situation, discuss how conflicts of interest are controlled in relation to tolling agreements on power. Discuss how energy markets are regulated, and the key parameters of such regulation, including any post-Enron changes to such regulation.

The federal agency with primary regulatory authority over the wholesale electricity markets is FERC. FERC has responsibility for regulating any “conflicts of interest” that might arise in connection with or as a result of tolling agreements insofar as the proper functioning of the interstate wholesale electricity markets is concerned. As discussed in more detail below, (i) FERC has broad authority over the wholesale electricity markets and FERC’s

jurisdiction extends specifically to evaluating tolling agreements and considering their impact on wholesale electricity markets; (ii) the FHC's activities in the wholesale electricity markets, and specifically tolling agreements that the FHCs might enter into, are subject to FERC scrutiny and are subject to certain limitations and conditions that must be observed at all times by the FHCs, including those that would go to "conflicts of interest"; and (iii) FERC, in response to the market abuses alluded to above, has substantially expanded and emphasized its regulatory and enforcement activities in order to ensure the efficiency and integrity of the wholesale electricity markets and its participants.

FERC is an independent federal administrative agency that regulates the interstate transmission of electricity, natural gas and oil.¹⁶ With respect to the elements of a tolling agreement that are subject to FERC regulation, FERC's jurisdiction is derived from, among other laws, the Federal Power Act (the "FPA")¹⁷ and the Natural Gas Act (the "NGA"),¹⁸ as amended and supplemented by the Energy Policy Act of 2005 ("EPACT 2005").¹⁹

Regulation of public utilities under the FPA extends to, among other things: (1) review of mergers, acquisitions and divestitures of jurisdictional facilities; (2) the price charged for electricity sold at wholesale in interstate commerce; and (3) affiliate transactions. Pursuant to the NGA, FERC regulates, among other things, the siting and construction of interstate natural gas pipelines; the rates that may be charged for transportation of natural gas in interstate commerce; and transactions between natural gas pipelines and their affiliates, including power generators. It is through both the FPA and the NGA, among other authority FERC possesses, that the energy markets, including "conflicts of interest" in relation to tolling agreements, are regulated. In particular, FERC was granted specific additional authority and responsibilities under EPACT 2005 to: (1) promote the development of a strong energy infrastructure, (2) support competitive markets and (3) prevent market manipulation. FERC has stated that these are its current top priorities and maintains a website where interested persons can readily access current information on these topics.²⁰

Any person engaging in wholesale power sales in interstate commerce is deemed to own or operate facilities subject to the jurisdiction of FERC under the FPA and is a "public utility" under the FPA because the term "facilities" includes contracts, books and records that are

¹⁶ FERC maintains a website that contains detailed information about FERC, the laws and rules it administers and the entities it regulates. *See* <http://www.ferc.gov/>.

¹⁷ 16 U.S.C. § 824 *et seq.* The FPA grants FERC jurisdiction over the transmission of electric energy in interstate commerce and the sale of electric energy at wholesale in interstate commerce.

¹⁸ 15 U.S.C. Section 717 *et seq.* The NGA grants FERC jurisdiction over the transportation of natural gas in interstate commerce.

¹⁹ Pub. L. No. 109-58, 119 Stats. 594 (Aug. 8, 2005).

²⁰ *See* <http://www.ferc.gov/about/top-priorities.asp>.

used in connection with jurisdictional sales.²¹ Thus, any FHC or affiliate that engages in wholesale electricity sales in interstate commerce is a “public utility” and subject to regulation by FERC under the FPA, notwithstanding that such member’s only “facility” may be a contract for the sale of electricity at wholesale prices in the trading markets. FERC does not draw a jurisdictional distinction between public utilities that own and operate plants, pipes and wires and other companies that are public utilities by virtue of their contract-based trading and power marketing activities, although FERC does take such distinctions into account in fashioning its rules when appropriate. Likewise, in implementing and enforcing its market oversight regulations, FERC does not draw a distinction between tolling agreements and other types of power purchase agreements that traders and power marketers employ in their day-to-day energy commodities business. In each case, FERC is under a statutory obligation to ensure that the rates charged for electricity at wholesale are “just and reasonable” as required by Section 205(a) of the FPA.²²

In order to participate in the wholesale energy market, the FHCs (or their affiliates) have each already been granted market-based rate authority (“MBR Authority”) by FERC. Essentially, MBR Authority is the right to engage in wholesale power sales at negotiated rates between a willing buyer and a willing seller in the market, rather than at rates based on cost-of-service,²³ subject to the overriding requirement of Section 205(a) that the rates charged be “just and reasonable”. MBR Authority is granted to an applicant upon a finding by FERC (among facts and criteria including the filing of rate schedules) that such applicant does not exercise “market power” (including, as discussed below, by way of and through a tolling arrangement) and cannot erect other barriers to entry for competitors. FERC requires each applicant seeking MBR Authority to file an application containing the necessary information for FERC to make a finding that the applicant does not have “market power.” Any fact commonly understood as a “conflict of interest” that results in an applicant having “market power” would factor into FERC’s review and analysis of the request for MBR Authority and could result in a denial of MBR Authority or the imposition of other restrictions and conditions on the applicant’s ability to participate in the power markets. For example, interstate gas pipelines are subject to codes of conduct that restrict their interactions with affiliated electric generators.²⁴

²¹ *Hartford Electric Light Company v. FPC*, 131 F.2d 953, 961 (2nd Cir. 1942), *cert. denied*, 319 U.S. 741 (1943).

²² 16 U.S.C. Section 824(d)(a).

²³ Cost-of-service is a pricing concept traditionally used as the primary basis for designing electric rate schedules. It attempts to correlate utility costs and revenues with the service provided to each of the various customer classes (e.g., industrial vs. residential). Rates under cost-of-service ratemaking are established through rate cases and approved by the regulator.

²⁴ FERC’s rules with respect to the competitive wholesale markets are designed and intended to create conditions under which a market can function with fairness and transparency. To that end, FERC does not regulate specific transactions by sellers with MBR Authority (which carries with it the privilege of not being held to cost-of-service rates), but rather FERC carefully vets who is granted such authority and

In an application for market-based rates,²⁵ an applicant must demonstrate that: (1) it satisfies FERC's standard for the grant of MBR Authority regarding generation market power (i.e., neither it nor any of its affiliates owns or controls generation facilities); (2) it satisfies FERC's standard for MBR Authority regarding transmission market power (i.e., neither it or nor any of its affiliates owns or controls transmission facilities); (3) it cannot erect barriers to entry (i.e., neither it nor any of its affiliates owns or controls any sites for the construction of new generating capacity, intrastate natural gas transportation or storage facilities, or other essential resources or inputs that that could be used to erect barriers to entry); and (4) it satisfies FERC's concerns regarding affiliate abuse and reciprocal dealing (i.e., neither it nor any of its affiliates has a franchised service territory for the sale of electricity). An application for MBR Authority must contain a comprehensive discussion of each of these areas and of any inability of the applicant to make clean representations about its business activities and assets. For example, if an applicant for MBR Authority cannot make an unqualified statement that neither it nor any of its affiliates owns or controls generation facilities or other essential resources such as gas supplies, then that applicant must disclose its generation holdings or gas supplies and provide further analysis and studies of the relevant markets in which applicant proposes to operate to demonstrate that the applicant does not in fact have "market power" before FERC will grant MBR Authority.²⁶ It is in this context — determining whether a person has "market power" — that FERC has considered its treatment of contracts such as tolling agreements.

In assessing whether an applicant for MBR Authority has "market power" such that FERC would deny MBR Authority to such applicant, FERC does indeed take into consideration the extent to which that applicant controls installed generation capacity within a given market. FERC is focused on control of installed generation capacity; however, a determination of control of installed generation capacity for FERC purposes depends on whether an applicant has an exclusive right to the electricity output of a Facility, whether by reason of

penalizes those who engage in unfair and manipulative practices that are detrimental to the proper functioning of the competitive market.

²⁵ There is no standard form to apply for MBR Authority. The applicant must file a pleading with FERC which is subject to public notice before the requested authorization may be granted.

²⁶ Through its regulations and orders, FERC has adopted comprehensive and detailed technical requirements for applications for MBR Authority and the contents and form of any required "market power" studies. Information on the application process and links to other relevant information, including instructions on the preparation of market power analyses, are available on FERC's website at <http://www.ferc.gov/industries/electric/gen-info/mbr.asp>. Indeed, FERC periodically amends and supplements these requirements as necessary and appropriate, and as it is required to do to fulfill its responsibilities under EPACT 2005. Presently, FERC is considering new rules governing market-based rates for public utilities which are summarized in FERC's *Notice of Proposed Rulemaking re Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Service by Public Utilities*. Docket No. RM04-7-000 (May 19, 2006). Note that a link to this Notice of Proposed Rulemaking as well as a much shorter fact sheet summarizing the Notice of Proposed Rulemaking is available at <http://www.ferc.gov/industries/electric/gen-info/mbr.asp>. The new proposed rules are the culmination of a rulemaking proceeding first initiated in April 2004 following the much publicized turmoil in the energy markets of 2001 to 2003.

such person having ownership of that Facility, having operational control of that Facility or having an exclusive contract right to the electricity output from that Facility. MBR Authority will be denied to persons who have “cornered the market” whether through plant ownership or an exclusive contract right — such as a tolling agreement or a power purchase agreement — to electricity generated by plants owned and operated by a third party.²⁷

In addition, any person holding MBR Authority must notify FERC of any changes in status, such as entry into new tolling agreements that could have the effect of giving that person additional rights to specific electricity output from installed generation capacity. The notification of change in status is designed to provide FERC with the information to permit FERC to monitor the justness and reasonableness of the rates charged and the continued appropriateness of the grant of MBR Authority. It is through this filing and other required reports of an informational nature, among other authority FERC possesses, that FERC exercises continued oversight over the wholesale power markets.

FERC has the ability to investigate claims of market manipulation (withholding of power, false bidding, etc.) whether those claims are self-reported, independently noted by FERC, brought to FERC’s attention by independent market monitors (e.g., FERC-approved regional transmission organizations and TSOs) or customer complaints, and to penalize market participants for violation of its rules.²⁸ EPACT 2005 specifically and intentionally enhanced FERC’s authority in this respect.²⁹ As required by EPACT 2005, FERC has promulgated detailed rules describing and prohibiting market manipulation, establishing penalties for violations of its rules, and clarifying its policies on enforcement.³⁰

EPACT 2005 gave FERC additional civil penalty authority under the relevant statutes and authorized FERC to assess civil penalties of up to \$1 million per day per violation for violations of rules, regulations and orders pursuant to such laws. FERC has not been reluctant to exercise its new enforcement authority and, in fact, on January 18, 2007, FERC imposed its first civil penalties under the new EPACT 2005 rules.³¹ Commenting on the proceedings, FERC Chairman Joseph T. Kelliher said,

²⁷ *Notice of Proposed Rulemaking re: Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities*, Docket No. RM04-7-000 (May 19, 2006).

²⁸ *See* Section 222 of the FPA, 16 U.S.C., Section 791a *et al.*, and Section 4A of the NGA, 15 U.S.C. Section 717 *et al.*, as added to by EPACT 2005.

²⁹ *See* Section 222 of the FPA, 16 U.S.C., Section 791a *et al.*, and Section 4A of the NGA, 15 U.S.C. Section 717 *et al.*, as added to by EPACT 2005.

³⁰ *Prohibition of Energy Market Manipulation*, Order No. 670, Docket No. RM06-3-000, 114 FERC ¶ 61,047 (Jan. 19, 2006); *Statement of Administrative Policy Regarding the Process for Assessing Civil Penalties*, Docket No. AD07-4-000, 117 FERC ¶ 61,317 (Dec. 21, 2006); and *Policy Statement on Enforcement*, Docket No. PL06-1-000, 113 FERC ¶ 61,068 (Oct. 20, 2005).

³¹ *See* Docket Numbers: IN07-1, IN07-3, IN07-4, IN07-5 and IN07-6 (Jan. 18, 2007).

“In the past, [FERC] lacked the enforcement power it needed to prevent market manipulation and uphold its tariffs and market rules. We asked Congress to give us the right regulatory tools to do our job. Congress agreed, and gave FERC new enforcement powers and significant civil penalty authority. Today, we exercise that power for the first time. We are committed to firm but fair enforcement and our actions today make that plain.”

In addition to FERC regulation, certain aspects of energy trading are also generally subject to regulation by the Commodity Futures Trading Commission (the “CFTC”) under the Commodity Exchange Act as the CFTC is charged with preventing fraud, manipulation and abuse in commodities markets generally.

VII. Question No. 7: Are there other types of tolling agreements that Clearing House members are considering entering into that do not involve the conversion of fuel to electricity? Are there other markets in which energy tolling and management agreements are emerging? Do markets in which storage of energy commodities may be involved (unlike in the case of electricity) present other issues?

The FHCs are not considering entering into tolling agreements that do not involve the conversion of fuel to electricity and are not aware of other markets in which those types of agreements are emerging.

VIII. Question No. 8: Can an independent power producer (“IPP”) be part of more than one independent system operator (“ISO”) organization?

The answer to the question depends on what is meant by the word “part” as there are any number of ways that an independent power producer (“IPP”) can be involved with an ISO.³² For purposes of the discussion that follows, it is assumed that the reference to an IPP is a reference to an entity that owns and/or operates a Facility, whether or not that Facility is subject to a tolling arrangement, and, in the general context of this letter, is the Seller under a tolling agreement.

In almost all cases, an IPP is physically interconnected to only one power grid under the control of a single TSO, which may be an ISO. (There are a handful of IPPs physically located on a “seam” between two control areas and interconnected to both grids, but this is rare.) As noted above, the IPP/Seller is subject to the safety and reliability requirements of the TSO responsible for grid management where the IPP is located. (For those IPPs on a seam, a single TSO has supremacy.) However, while physical location of an IPP will dictate which TSO has ultimate authority over the operation of that IPP, physical location has little to do with an IPP’s/Seller’s/Buyer’s ability to participate in an energy market as a trader.

³² In addition to its management of transmission facilities and its interaction with generators in connection with its responsibility for the safety and reliability of the local electrical grid, an ISO (and RTOs as well) can also serve as a market monitor for wholesale electricity transactions occurring within its footprint.

Generally, any person involved in the buying or selling of electricity within a given market is a “market participant” in that market whether or not that person is a “member” of a specific ISO. Each ISO has detailed market rules, set forth in its FERC tariff, governing the conduct of market participants engaging in business in the geographical region (the footprint) under that ISO’s control. Any person can become a member of an ISO if that person satisfies the criteria for membership specified for that ISO. A person need not be a market participant or a transmission owner to become a member of an ISO. Membership carries with it the right to participate in the governance of the ISO through various committees; and voting is open to consumer advocacy groups and state regulators as well as transmission owners and market participants. A person can be a member of more than one ISO.

Thus, an IPP (or a Seller under a tolling agreement) can be a “market participant” in more than one ISO (e.g., can sell power into more than one market) and can be a “member” of more than one ISO because those designations, and the nature of the participation in ISO affairs denoted by those designations, do not depend on the physical location of the Facility owned and/or operated by that IPP. An IPP’s (Seller’s) flexibility to engage in business in more than one market can be limited by contract with an ISO just as it can be limited by a contract with a Buyer. For example, an IPP may agree to provide Ancillary Services to an ISO in consideration for a fee and thereby limit its ability to engage in “off-system” sales.

In an emergency situation, however, an IPP’s (Seller’s) flexibility to sell electricity where it might choose, or even to operate a Facility, can be limited in order to ensure the safety and reliability of the grid. In this context, the physical location of the Facility, and its interconnection to the grid, are the determinative criteria under long-standing policies and rules developed by NERC to ensure the safety and reliability of the system. As noted above, tolling agreements typically contain provisions acknowledging the TSO’s/ISO’s and NERC’s ultimate authority with respect to whether a Facility will be operated regardless of any separate contractual undertakings.

IX. Question No. 9: Discuss how entering into tolling agreements with IPPs would affect the Clearing House banks’ project finance businesses and other financial services businesses involving IPPs.

If permitted to engage in tolling agreements, the FHCs would evaluate the commercial, legal and regulatory implications of providing to their customers any combination of tolling agreements, financing and financial services, both generally and with respect to any given transaction. The FHCs in the group have policies and procedures in place to ensure compliance with the anti-tying provisions in Section 106 of the Bank Holding Company Act Amendments of 1970. As in the case of other credit transactions, the FHCs and their affiliated banks would apply those procedures to any tolling agreement entered into with an IPP where the bank also maintained lending relationships. If the lending bank, as part of its credit determination, required the borrower to hedge its exposure with an appropriate party, it would do so in compliance with Section 106. If the FHC and any affiliated bank provided both services, it would do so on terms complying with Section 23B of the Federal Reserve Act, as applicable.

It should be noted, however, that FHCs already consider all of these issues in connection with the various combinations of risk management and financial intermediation services and other financial and advisory services that they already provide to this industry. The FHCs that have traditionally provided financing and financial services to IPPs are natural choices to provide the financial intermediation and risk management services to these same customers, and customers approach these FHCs for the combination of these services that the FHCs can provide — both as a matter of convenience and economy of resources.³³ It should also be noted that while the FHCs are interested in providing this combination of services, the marketplace is looking for this combination of services, and generators are becoming increasingly sophisticated in their abilities to structure, evaluate and negotiate packages of risk management and financing products from different combinations of providers that are in their economic best interests.

X. Question No. 10: Discuss the role of tolling agreements in the project financing of energy-generating facilities; in particular, how such project finance deals work from the perspective of the lender. (We note that the life of a typical tolling agreement is less than the life of a typical power plant.)

In connection with the construction of new generating plants or sales of existing generating plants, tolling agreements have had, and will continue to have, an important role in enabling generation plant owners to secure financing for the construction of new generating units or the acquisition of existing facilities. In order to purchase or construct a new Facility, the owner (or the entity that will become the “Seller” under the tolling contract) is typically required to obtain financing. The lenders providing the financing will typically require, as a condition to borrowing, that projected cash flows from the Facility, once it commences operations, are sufficient to make interest payments for a period of time or to ultimately repay the loan. While a lender’s comfort with the energy market or the size of the loan and the otherwise available collateral pool will influence a lender’s need for assurances as to the potential cash flows available from the Facility, it is not uncommon for lenders to require that most, if not all, of the Facility’s fuel requirements and electricity output be hedged for a period of time to ensure a certain level of cash flow and to make the Facility less susceptible to valuations based upon daily price fluctuations in the fuel and electricity markets. Conversely, owners, even apart from lender requirements, may have a similar interest in locking in a certain revenue stream in order to guarantee themselves a certain rate of return and level of profitability. As noted above, the term of hedges desired by lenders and owners will vary based on many factors, including without limitation, the size of the financing, the owner’s interest in developing a trading infrastructure around the assets it owns, and the perceived short and long-term value of the Facility relative to current market prices.

³³ For instance, it has become fairly routine for acquirers of generation facilities to obtain both acquisition financing and price risk management products from the same institutions. In many cases, the obligations under the entire financing and hedge package is secured by the same collateral. This integration of financing and hedge transactions can bring substantial reductions in transaction costs.

The hedges that are used today by owners and lenders include financially settled fixed for floating swaps on energy, financially settled heat-rate options, physically settled heat-rate options for firm energy, and tolls, which are essentially physically settled heat-rate options for unit contingent energy. In addition to the energy component of the hedge, the owner may want to secure the value of the other products associated with the Facility and thus may want to lock in a fixed rate for Ancillary Services associated with the Facility that are typically done in a transfer of ownership of such products (usually through transfer of contractual ownership through the relevant TSO), and not financially, since there are limited, if any, suitable index prices for such products. While all of hedge products listed above are possible hedge tools available to lenders and owners, the toll has unique benefits since (i) it typically transfers all but the operating risk of the Facility to the counterparty under the tolling agreement and (ii) it typically involves electricity and all the related products including Ancillary Services.

In addition to the “buy side” value of being able to offer a tolling agreement as set forth above, there are tremendous benefits to the market place and lenders in being able to assist entities that desire to sell generating units (the “sell side”). It is not uncommon for owners to hire financial advisors when seeking to sell generating assets. In connection with this representation, the advisor may put together what is known in the industry as a “staple financing package and staple hedge” for potential buyers of the assets to consider in assessing the assets. In the staple package, the advisor (who is typically also a lender and hedge provider) will set forth binding terms under which it would be willing to finance or hedge the asset being offered for sale. In this way, the staple financing and hedge provide potential buyers a “floor” package that they then consider in reviewing the potential purchase or use to be able to consider financing terms and hedging packages available from other entities. No buyer is obligated to take either the financing or the hedge staple package, but it assists both buyers and sellers by establishing a floor offer for the financing or hedge packages. While these staple hedge packages can rely on the hedge tools listed above, it would benefit buyers, sellers and lenders if they could add a tolling agreement to the potential hedge products they can offer.

XI. Question No. 11: Discuss the overall competitive situation in the power generation market, including the impact and involvement of energy trading companies that control generation capacity pursuant to tolling agreements, and controls on concentration and market manipulation.

As described in the answer to Question No. 6. above, FERC grants and allows an entity to retain MBR Authority only if such entity does not possess market power. Generally, as more entities actively participate in the marketplace, the marketplace becomes more liquid and more competitive. However, to the extent one entity begins to “corner the market”, the FERC will take action to mitigate that entity’s market power, including instituting bid caps, requiring divestiture of assets or rescission altogether of MBR authority. Also, any entity caught manipulating the market is subject to civil and criminal penalties.

Section 1815 of EPACT 2005 established an interagency task force, the Electric Energy Market Competition Task Force (the “Task Force”), with one representative from each of the Department of Justice, FERC, the Federal Trade Commission, the Department of Energy and

the Rural Utilities Service. The Task Force was charged with conducting a study and analysis of competition within the wholesale and retail market for electric energy in the United States and delivering a final report on its findings to Congress. The draft report of the Task Force was made public for comment on June 5, 2006 on FERC's website in Docket No. AD05-17-000, and has received many comments from interested persons. A final report has not yet been issued.

Neither the Clearing House nor the FHCs specifically endorse or agree with each and every finding contained in the draft report (and indeed take issue with some of such findings). However, in response to the above question, which requires substantial research and analysis without there being any one correct answer with which all interested persons will agree, we respectfully suggest that the draft report might be a starting point for discussion. We will be happy to address any further specific questions on issues of competition in the power generation market. *See also* our response to Question 6.

XII. Question No. 12: Are the Clearing House members seeking Board approval for tolling agreements under which one FHC would be the exclusive input provider and the exclusive output purchaser for a power plant?

The FHCs are interested in entering into tolling agreements under which they would have an option to purchase the electricity output of 100% of the production capacity of the Facility. It is critical to note, however, that this request is for 100% of the electricity that the Facility is capable of producing (and which typically may also then be sourced from the market) but it is not for 100% of the electricity output for the full operating life of the Facility. In fact, a typical timeframe for a tolling agreement is for significantly less than half the expected operating life of the Facility thereby leaving the Seller with significant economic interest in the Facility. In addition, it is important to note that if an FHC contracted for 100% of the capacity of a Facility for a limited period of time, it would not necessarily be the exclusive purchaser of the electricity output of the Facility because, during those periods when the Buyer elects not to exercise its option to purchase electricity from the Facility, the Seller often retains the right to sell electricity output from the Facility to other purchasers and may do so. In addition, the TSO also could require that electricity be generated at the Facility when necessary for the reliability of the transmission grid.

XIII. Question No. 13: Indicate the extent to which the tollor is in sole control of whether and when the plant operates. Discuss the "maximum" ability of the tollor to control the plant's operations — e.g., the plant's maintenance schedule, its hiring and firing of employees, and its capital expenditures — through contract or otherwise.

Tolling agreements involve the purchase and sale of energy commodities that the FHCs have an existing right to trade and hold under the Board's Regulation Y and complementary authority granted by the Board. Staff has questioned whether, in entering into tolling agreements, FHCs can be viewed as controlling the Facility with which the FHC contracts. The FHCs respectfully submit that there is no basis for such a determination, for three principal reasons:

1. Another person (the Seller, *i.e.*, the owner/operator of the Facility) has ownership of and clearly exercises control over the Facility;
2. An FHC's relationship with the Seller and the Facility in a tolling transaction fall squarely within presumptions of non-control in the Board's regulations and an FHC possesses none of the indicia of control identified by the Board in prior interpretations; and
3. The rights an FHC would have under the tolling agreement (*i.e.*, the right to deliver fuel and the right to receive electricity) all are clearly entailed by the permissible commodities contracts entered into with the Seller and do not exceed the rights contemplated by permissible commodities trading activities.

As discussed above, an FHC party to a tolling agreement would not thereby have (i) an equity interest in the Facility or (ii) any contractual rights to be involved in the general management or overall operations of the Facility. The Seller would remain in control of all day-to-day management and operational decisions, subject to the operational requirements of the TSO and NERC. An FHC would have no indicia of control over the Seller or the Facility by means of a tolling agreement:

1. The FHC would have no director or officer interlocks with the Seller or have any employees located at the Facility;
2. The FHC would have no right to replace the operator or manager of the Facility;
3. The tolling agreement would be entered into on an arm's-length basis;
4. The Seller would be responsible for acquiring and maintaining all permits, licenses, certifications and approvals necessary for the construction, operation and maintenance of the Facility;
5. The Seller would be responsible for operation and maintenance of the Facility. Scheduled maintenance would be required to be taken in accordance with reliability rules and is typically pre-agreed in the tolling agreement. If it does not jeopardize the safe and reliable operations of the Facility and is done in accordance with all applicable laws and Prudent Utility Practice, however, the Buyer may have a right to request minor modifications in scheduling maintenance. In all circumstances, though, final approval rests with the Seller and the TSO where the Facility is located (TSO must approve maintenance schedules). Unscheduled maintenance would occur if dictated due to unforeseen events at the Facility and is always and solely determined by the Seller;
6. The Seller would operate the Facility and interact with the TSO in a manner that would maintain the reliability of the local and regional transmission grid and in accordance with the reliability and TSO requirements;

7. The Seller would be solely responsible for all environmental liabilities and costs with respect to the Facility;
8. The FHC would be obligated to bear all the risk related to fuel prior to delivery to the Facility and electricity after delivery from the Facility;
9. The FHC would be obligated to arrange for the delivery of fuel to the Facility and pay transportation charges associated with the fuel delivery;
10. The FHC would be obligated to pay for transmission charges related to the electricity it purchases from the Facility;
11. The FHC would have the right to exercise its option to provide fuel to the Facility and purchase electricity generated by the Facility;
12. The FHC would not be permitted to direct the Seller to hire or fire employees or dictate capital improvements; and
13. The FHC would not have the right to require capital improvements.

Accordingly, we respectfully submit that there is no control by the FHC over either the Seller or the Facility.

* * * *

We appreciate the opportunity to continue to discuss these issues with the Board's staff. If you have any further questions or would like to discuss the information contained in this letter, please contact the undersigned at (212-612-9205) or Michael Wiseman (212-558-3846) or Elizabeth T. Davy (212-558-7257) at Sullivan & Cromwell LLP.

Sincerely yours,



Norman R. Nelson

cc: Mark Van Der Weide
Andrew Baer
(Federal Reserve)

**MASTER POWER PURCHASE AND SALE AGREEMENT
CONFIRMATION LETTER
BETWEEN
_____ and _____
_____**

This confirmation letter ("Confirmation") confirms the Transaction dated _____, between _____ ("Seller") and _____ ("Buyer") regarding the sale and purchase of Unit Contingent Capacity, Associated Energy and Ancillary Service Capacity in accordance with and subject to the terms and provisions of the EEI Master Power Purchase & Sale Agreement (the "Master Agreement") dated _____, _____ between the Parties under the following terms and conditions (capitalized terms used but not defined herein shall have the meanings ascribed to them in the Master Agreement).

Seller: _____

Buyer: _____

Delivery Period: _____ through _____, _____ months of _____ and _____ excluded.

During the Delivery Period, Buyer shall have the right to schedule the Product, in amounts up to and including the Contract Capacity, for Hour Ending ("HE") 0100 through HE 2400 Pacific Prevailing Time ("PPT"), Monday through Sunday, including NERC Holidays.

Product: Unit Contingent Energy and Ancillary Services

Applicable Generating Unit:

Service Level: "Unit-contingent" shall mean that if an Applicable Generating Unit's Available Capacity is reduced as the result of an Excused Event, Buyer's rights to schedule Associated Energy and Ancillary Services shall be reduced to the level of Available Capacity and Seller shall be under no obligation to provide compensation, in any form, to Buyer for the reduction, so long as the Unit's Actual Availability Factor is greater than or equal to the Guaranteed Monthly Availability Factor. If the Applicable Generating Unit's Available Capacity is reduced below the Guaranteed Monthly Availability Factor, Buyer shall be entitled to a reduction of Capacity Payments. The methodology for calculating such reductions is detailed in the Guaranteed Monthly Availability Factor section of this Confirmation.

Notwithstanding the foregoing, Seller may utilize any physical or contractual resources at its disposal in order to deliver the Product to Buyer under this Confirmation. Furthermore, this Confirmation shall not confer upon Buyer any

rights regarding Seller's dispatch, operations and maintenance of the Applicable Generating Unit.

Ancillary Services: Consistent with the rules of the ISO, Buyer may schedule, in amounts detailed in Appendix A, (a) Spinning Reserve, (b) Non-spinning Reserve, (c) Regulation Up, (d) Regulation Down and (e) Replacement Reserve.

Contract Capacity: _____: ____ MW

Capacity Price: The monthly Capacity Price, in \$/kW-month, shall be: \$_____.

**Strike Price:
(Heat Rate)** MMBtu/MWh

Variable O&M Charge: The Variable O&M ("VOM") Charge for Delivered Energy during the Delivery Period shall be equal to:

\$____ / MWh

Strike Adder: When Buyer requests delivery of the Product after a period of twenty-four (24) contiguous hours or longer in which energy has not been delivered, Buyer shall pay Seller the following charge ("Strike Adder"):

\$_____

Power Delivery Point: The Power Delivery Point shall be the _____ .

**Buyer's Gas Delivery
Obligations:**

No later than _____ on the day prior to each day of delivery, Buyer shall provide Seller with a schedule indicating the amount of natural gas Seller intends to deliver to the Gas Delivery Point.

Seller's obligation to deliver Associated Energy scheduled by Buyer and any Ancillary Services shall be contingent upon Buyer providing the Contract Gas Quantity, as allowed under the applicable pipeline and tariff rules, to the Gas Delivery Point (as defined below). Buyer shall be responsible for delivering the Contract Gas Quantity to the Gas Delivery Point. Buyer shall be responsible for costs associated with providing the Contract Gas Quantity to the Gas Delivery Point, including costs of (a) gas and (b) transportation service.

Contract Gas Quantity:

The Contract Gas Quantity for each hour shall be expressed in MMBtu and equal the sum of the following:

1. The quantity of natural gas calculated by multiplying the MW of Scheduled Energy in each hour multiplied by the Strike Price; plus
2. The quantity of natural gas equal to the fuel retention, if any, required by a transporting gas pipeline to transport the Contract Gas Quantity to the Gas Delivery Point.

Gas Delivery Point: The Gas Delivery Point shall be _____

Gas Index: The natural gas index for _____ (“Midpoint”) Daily Price survey as published by Platt’s *Gas Daily* for the flow day corresponding to the delivery day.

Capacity Payment: Seller will provide Buyer with an invoice for the Contract Capacity Payment no later than ten (10) Business Days in advance of the calendar delivery month. No later than five (5) Business Days prior to each month of delivery, Buyer shall pay Seller a Capacity Payment, calculated as the product of (a) the Contract Capacity, (b) the Capacity Price and (c) 1,000 kW per MW.

Variable Payment: Buyer shall pay Seller, in accordance with Article 6 of the Master Agreement, a Variable Payment consisting of the following:

1. A VOM Payment, calculated as the product of (a) the Delivered Energy for the month of delivery, expressed in MWh and (b) the Variable O&M Charge (“VOM Payment”); and
2. A Strike Adder Payment equal to the sum of the Strike Adders incurred during the month of delivery (“Strike Adder Payment”).

Fuel Supply: Buyer shall be responsible for arranging delivery to the Gas Delivery Point of the Contract Gas Quantity for each hour in which Buyer has scheduled delivery of the Product.

Transmission: Seller shall be responsible for all transmission costs and arrangements, including risk of transmission outage and curtailment, up to and at the Power Delivery Point. Buyer shall be responsible for all transmission costs, including risk of transmission outage or curtailment, from the Power Delivery Point.

Delivered Energy: The amount of Energy, expressed in MWh, delivered by Seller to Buyer at the Power Delivery Point during an hour.

Scheduled Energy: The amount of Energy, expressed in MWh, requested by Buyer in accordance with the scheduling procedures, for delivery to the Power Delivery Point during an hour.

Total Energy: The product of the Contract Capacity multiplied by all hours during a given month during the Delivery Period, expressed in MWh.

Actual Availability Factor: The quotient of (a) the sum of Delivered Energy in a month divided by (b) Total Energy for the same month less Excused Energy for the same month.

Guaranteed Monthly Availability Factor: Seller guarantees that the Actual Availability Factor calculated on a monthly basis for the Units shall be:

During the months of _____ through _____ and _____ through _____:

9_%

During the months of _____ through _____:
9_%

Every month Capacity Payments due the Seller from the Buyer for that month will be subject to reduction for failing to meet the Guaranteed Monthly Availability Factor as follows: For each percentage point amount the Actual Availability Factor during the Delivery Period is below the Guaranteed Availability Factor (the "Deficiency Amount"), Seller shall pay Buyer a rebate calculated as the product of (a) the Deficiency Amount; and (b) the Capacity Payment for the month.

Excused Energy: Contract Capacity that is not available during each month of the Delivery Period as the result of an Excused Event.

Excused Events: Excused Events shall be: (a) a Force Majeure Event affecting the Unit; (b) Scheduled Maintenance and/or testing of the Unit; (c) Buyer's failure to deliver gas to the Gas Delivery Point; (d) Buyer's failure to accept Energy and/or make transmission arrangements from the Power Delivery Point; (d) failure by Seller to deliver Energy in response to a schedule from Buyer due to its inconsistency with Scheduling Parameters, as specified in Schedule 1; (f) conditions on the electric transmission system, including a Force Majeure event and the refusal of the transmission provider to accept and transmit energy; and (g) conditions on the gas pipeline system, including a Force Majeure event and curtailment of firm natural gas transportation service.

Force Majeure Event: Force Majeure Event shall mean a cause or event that prevents a Party from performing any of its obligations under this Confirmation that is not within the reasonable control of the Party, without the fault or negligence of the Party and that by the exercise of due diligence the Party is unable and could not reasonably have been expected to avoid, cause to be avoided or overcome. A Force Majeure Event shall excuse Seller from its performance obligations hereunder during the existence of such Force Majeure Event until such time as it is cured. A Force Majeure Event shall relieve Buyer of its obligations to make Capacity Payments for the time periods related to unavailability due to such Force Majeure Event, until such time as the Force Majeure Event is cured, as set forth above under "Guaranteed Monthly Availability Factor". Force Majeure Events may include, but are not restricted to, acts of God; acts of the public enemy, war, blockades, insurrections, sabotage, civil disturbances, riots, terrorism; strikes or other work stoppages, lock-outs, or other industrial disturbances or labor disputes; labor or materials shortage; epidemics, landslides, lightning, earthquakes, firestorms, hurricanes, tornadoes, floods, washouts; fire, explosion, or other unusually severe or extreme actions of the elements; catastrophic equipment failure; and actions or failures to act of any federal, state, local, municipal or other governmental body or agency preventing, delaying or otherwise adversely affecting performance by a Party hereto.

Force Majeure Events shall not include (a) changes in market conditions that affect the cost or availability of supply of goods or services, (b) the unavailability of equipment except when such unavailability is directly caused by an event of

Force Majeure as defined above, which could reasonably have been avoided by compliance with Good Utility Practices, and (c) changes in market conditions that affect the price of energy or capacity or fuel.

Power Scheduling: No later than _____ on the pre-Scheduling Day, Buyer shall provide Seller with a schedule indicating the amount of the Associated Energy and/or Ancillary Services Buyer requests for delivery to the Power Delivery Point for every hour of the day of delivery. For intra-day scheduling, Buyer shall provide Seller with an hour-ahead schedule indicating the amount of Associated Energy and/or Ancillary Services Buyer requests for delivery to the Power Delivery Point consistent with the Scheduling Parameters specified in Schedules 1 and 2. If no hour-ahead schedule is submitted and the ISO (in the event of an emergency) does not instruct otherwise, the day-ahead schedule governs.

Scheduling Restrictions: All Scheduling Restrictions associated with Contract Capacity, Ancillary Service Capacity and Scheduled Energy provided pursuant to this Transaction are specified in Schedule 1 attached to this Confirmation. In scheduling delivery of the Product, Buyer shall comply with all applicable Scheduling Restrictions.

Notification Time: Buyer shall notify the Seller when establishing or changing an Energy schedule or Ancillary Services Capacity request in time for Seller to accommodate such change within the Scheduling Parameters detailed in Schedule 1 to this Confirmation.

Credit: Credit provisions satisfactory to Buyer and Seller under the terms of the Master Agreement and special provisions mutually agreed between the parties in conjunction with this Transaction.

Contact Information:

	Seller	Buyer
Day Ahead Trading:	Phone/Fax	Phone/Fax
Real-Time:		
Settlement:		

ACKNOWLEDGED AND AGREED TO AS OF _____.

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

APPENDIX A

_____ Unit Capabilities

Applicable Generating Units:

Unit(s)		
Location		
Name Plate		
ISO Resource ID		
ISO P. Max		
Net Dependable Cap.		
ISO P. Min		
ISO Ancillary Service Certifications		
Unit Description		

Ancillary Service Capacity	Maximum Quantity (Per appropriate Product)
Regulation Up	
Regulation Down	
Spinning Reserve	
Non-Spinning Reserve	
Replacement Reserve	

Schedule 1

Scheduling Parameters

<u>Type</u>	<u>Measurement Units For Limit</u>
Minimum Scheduling Notice	[Hours]
Minimum Run Time	[Hours]
Minimum Down Time	[Hours]
Ramp Rates	[MW/Min]
Minimum Schedule Quantity	[MW]

Appendix C

Definitions

UNLESS OTHERWISE DEFINED IN THIS CONFIRMATION OR IN THE MASTER AGREEMENT AND ATTACHMENTS, CAPITALIZED TERMS SHALL BE USED WITH THE MEANINGS ASCRIBED TO THEM IN THE CAISO TARIFF.

Ancillary Service Capacity: Capacity associated with Spinning, Nonspinning, and Replacement Reserves, Regulation Up or Regulation Down, or any other Ancillary Service (as such terms are defined in the Tariff) AND available to Buyer within the scope of parameters allowed Buyer under this Transaction.

Associated Energy: The Energy expressed in megawatt-hours ("MWh") or kilowatt-hours ("KWh"), expressly associated with Energy dispatched in accordance with the Transaction.

Applicable Generating Unit: The existing generating unit providing Unit Contingent Capacity, or any New Generating Unit in replacement thereof, as the case may be.

Available Capacity: For a Unit Contingent Sale, the amount of Contract Capacity that is available to Buyer hereunder from the Applicable Generating Unit on average during an hour.

Contract Capacity: The amount of Unit Contingent Capacity that Seller is committing to provide to Buyer pursuant to the Transaction.

Good Utility Practices: The practices, methods and acts engaged in or approved by a significant portion of the electric utility industry operating in the _____ region during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather includes all acceptable practices, method or acts generally accepted in the region. Good Utility Practice shall include, but not be limited to, applicable law and regulatory requirements, and the criteria, rules and standards promulgated by NERC, the _____, RTO, National Electric Safety Code, and National Electrical Code, as they may be amended from time to time, including the rules and guidelines and criteria of any successor organizations.

Heat Rate: The amount of gas in British Thermal Units required to produce one KWh of Associated Energy.

Operating Parameters: The limitations on Buyer's ability to schedule and use Contract Capacity, Ancillary Services, and Associated Energy described in Schedule 1.

Pacific Prevailing Time or PPT: Pacific Daylight Time when California observes Daylight Savings Time and Pacific Standard Time otherwise.

Scheduled Outages: A period during which any or all of the Applicable Generating Units is not capable of providing service due to Scheduled Maintenance.

Unit Contingent Capacity: Electrical capacity that is dependent upon the availability and operation of the Applicable Generating Unit.

Unscheduled Outage: A period during which the Applicable Generating Unit is not capable of providing service due to the need to maintain or repair a component thereof that is not Scheduled Maintenance.