BEFORE THE
NEW YORK STATE PUBLIC SERVICE COMMISSION

In the Matter of Eligibility Criteria for Energy Service Companies.	)	**Case 15-M-0127**
Proceeding on Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-Residential Retail Energy Markets in New York State.	)	**Case 12-M-0476**
In the Matter of Retail Access Business Rules.	)	**Case 98-M-1343**

DIRECT ENERGY SERVICES, LLC
COMMENTS ON STAFF WHITEPAPERS

Direct Energy Services, LLC, on behalf of itself and its affiliates doing business as energy service companies ("ESCOs") in New York State (collectively, "Direct Energy"),[1] submits these comments in response to the Notice Seeking Comments issued in these proceedings on May 10, 2016 (the "Notice"). The Notice requested comments on three whitepapers (collectively, the "Whitepapers") issued by DPS Staff, which addressed the topics of: (1) satisfying the affirmative customer consent requirement for effecting a material change to an existing contract through an enhanced notice process; (2) options for ESCO performance bonds or other security interests; and (3) regulation of ESCO prices through the adoption of a "reference price" for 12-month, fixed-price electric or natural gas service to residential and small

[1] Direct Energy's affiliates doing business in New York State include Bounce Energy NY, LLC; Energetix DE, LLC; Gateway Energy Services Corporation; NYSEG Solutions, LLC; Direct Energy Business, LLC; and Direct Energy Business Marketing, LLC.

business customers. In these comments, Direct Energy supports Staff's proposal on to affirmative consent, reiterates its support for imposing a financial assurance requirement on ESCOs operating in New York, and opposes, on multiple grounds, Staff's proposal to establish a reference price for fixed-price service to mass market customers.

INTRODUCTION

The Notice is the latest in a series of actions taken by the Commission, beginning with the Commission's February 23, 2016 Order in these proceedings (the "February 23 Order"),[2] that seek to significantly alter the retail market for residential and small business energy customers in New York. Two of the Staff proposals in the Whitepapers would mitigate some of the most negative impacts on the retail market of the February 23 Order. Specifically, the proposal to satisfy the requirement of affirmative customer consent to a material change to an existing customer agreement through an approved notice procedure would allow ESCOs to move customers from a non-compliant product to a compliant product without undue disruption to their business. In the absence of such a mechanism, Direct Energy estimates that it would lose between 80 and 90 percent of its mass market customer base in New York.[3] Staff also proposes to also allow fixed-price service to become a compliant product for purposes of mass market customers, which would be a particularly welcome change both for gas customers (for whom there is no 30 percent renewable option at this time, leaving the "guaranteed savings versus the utility rate" as the only compliant product for gas customers) and for small business customers, who find particular value in fixed-price products. The various proposals for enhanced financial

[2] Case 15-M-0127, *In the Matter of Eligibility Criteria for Energy Service Companies*, Order Resetting Retail Energy Markets and Establishing Further Process (Issued and Effective February 23, 2016).

[3] It was Staff's March 2, 2016 guidance that affirmative consent would, in fact, be required to move existing variable electric customers to the compliant 30 percent renewable product that prompted Direct Energy to seek relief from the February 23 Order in the New York Supreme Court. Ordering paragraphs 1-3 of the order remain stayed pursuant to a temporary restraining order granted by the Court on March 4.

assurance requirements would help protect customers and ensure that only ESCOs with some minimum level of financial wherewithal are allowed to participate in the New York market.

But Staff's whitepaper proposing that the Commission should "establish a just and reasonable per kilowatt-hour price for a 12-month fixed-price supply product" (the "Reference Price Whitepaper") would take New York into uncharted and unwelcome territory. This proposal's many legal, procedural, factual and policy infirmities are discussed in detail below, but a few overarching themes should be mentioned by way of introduction. First, the Reference Price Whitepaper makes clear that there continues to be a fundamental disagreement with respect to the nature and extent of the Commission's authority to regulate the prices charged by entities that are not franchised distribution utilities. DPS Staff suggests in the Reference Price Whitepaper that the Commission should conclude, notwithstanding its earlier pronouncements to the contrary,[4] that it is empowered to extend its regulatory authority to control prices charged by ESCOs.[5] Any such action would clearly exceed the powers granted to the Commission by the Legislature and would therefore be preempted by the "national economic policy of competition" expressed in the Sherman Act.[6]

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[4] *See, e.g.*, Case 09-G-0289, *In the Matter of the Rules and Regulations of the Public Service Commission, Contained in 16 NYCRR, in Relation to Complaint Procedures—Appeal by Ms. Laura Jacobson of the Informal Decision Rendered in Favor of MX Energy (727550)*, Commission Determination (Issued and Effective August 23, 2010)("Finally, it is well understood that we lack authority to regulate the rates that an ESCO charges any customer (residential or nonresidential). Therefore, neither an informal hearing officer nor the Commission may determine that an ESCO's charges to its customer is improper.").

[5] At the May 31, 2016 technical conference, Staff maintained that the reference price was not a "hard price cap," as the Reference Price Whitepaper states that "[p]rices above the reference price would be subject to staff review and possible compliance action" rather than being subject to an immediate order to show cause. In Direct Energy's view, this is a distinction without a difference, as the clear implication of the Reference Price Whitepaper, as illuminated by Staff at the technical conference, is that ESCOs pricing above the reference price would be presumed guilty until proven innocent. The fact remains that there appears to be no scenario in which an ESCO could intentionally price above the applicable reference price without exposing itself to a compliance action. If there is a practical difference between that result and a "hard price cap" in terms of how an ESCO could prudently operate its business in New York, we do not see it.

[6] 15 U.S.C. §§ 1 and 2. This concern, along with our overall reluctance to acquiesce in and facilitate what we see as regulatory over-reach by the Commission, explains Direct Energy's refusal to participate in the development of the reference price in the way Staff apparently anticipated ESCOs would.

Second, Staff's proposal to regulate the price of ESCO fixed-price service is not supported by the kind of factual findings and policy conclusions that required for valid agency action. Neither the February 23 Order nor the Reference Price Whitepaper present any evidence that would support the conclusion that there is a market failure with respect to fixed-price service in markets for electric or gas service to residential or small commercial customers. In the absence of any such findings, even if the Commission had the authority to regulate in this arena, it would be compelled to forbear from doing so.

Finally, as described in some detail in the attached report of Guy Sharfman of Intelometry, Inc., a Houston-based consulting firm with considerable expertise in the retail price of electricity and natural gas service, the pricing formulas themselves and Staff's proposal for implementing them are replete with inaccuracies, gaps, false assumptions, an absence of detail, ambiguous terms, and likely unintended negative consequences that should cause them to be summarily rejected, even if a proposal to cap ESCO prices were not unlawful.

In sum, while some of Staff's proposals in the Whitepapers would be helpful in getting the New York mass market back on track in the wake of the negative impacts of the February 23 Order, Staff's reference price proposal encourages the Commission to take yet another step in the wrong direction, away from a healthy reliance on competition and toward the kind of regulatory micromanagement that only hurts consumers. Direct Energy continues to hope that the Commission will opt for competition rather than regulation, especially where the product at issue – fixed-priced service – has proven to be valuable to residential and small business customers alike.

I. COMMENTS ON WHITEPAPERS ON AFFIRMATIVE CONSENT AND PERFORMANCE BONDS

A. Direct Energy Supports Staff's Recommendations Regarding Affirmative Consent for Material Changes to Customer Agreements

The whitepaper proposing that the affirmative consent required to effect a "material change" in a customer agreement may be obtained by complying with the notice requirements established in that whitepaper is a helpful addition to the regulatory landscape in New York. Under the current version of the Uniform Business Practices, ESCOs must receive affirmative consent from each affected customer in order to make a "material change" to an existing customer agreement. Moreover, the UBPs consider any change – other than a change in price authorized by the customer's agreement – to be a material change. This requirement has severely limited ESCO flexibility to make even helpful changes to customer agreements, as obtaining affirmative consent from individual customers has typically had a very low response rate, at least in Direct Energy's experience. The great majority of customers simply do not respond to such requests. The Staff proposal would allow the affirmative consent requirement to be met through a series of notices to affected customers. Based on a similar regulation in Pennsylvania, which requires two notices before a change can become affected, the Staff proposal adds a third notice in the form of a postcard reminder shortly after the second notice is sent. Direct Energy views this addition to the Pennsylvania approach as a reasonable adaptation for the New York market, and fully supports the Staff recommendation.

B. Direct Energy Reiterates Its Support for a Requirement that ESCOs Post a Reasonable Level of Security to Guarantee Their Obligations and Potential Obligations to Their Customers and the State

On March 11, 2016, in response to the Commission's Notice Seeking Comments that accompanied the February 23 Order, Direct Energy submitted comments supporting the addition of a bonding requirement for all ESCOs doing business in New York.[7] Direct Energy continues to support that proposal for the reasons stated in those comments.[8] We will comment briefly on two other matters related to the Staff proposal. First, some commenters are likely to suggest alternatives to the Direct Energy proposal. For example, at the collaborative meeting addressing this topic, several ESCOs recommended that the level of financial assurance be tied to an ESCO's presence in the market, as measured by revenue or some other volumetric indicator. Direct Energy would not oppose such an approach to the financial assurance requirement. The key point is that the Commission should adopt a financial assurance requirement that helps protect customers and ensures that only ESCOs with at least a minimum level of financial strength are doing business in New York. The second point relates to Staff's suggestion that the purchase of receivable discount could be used as a source of financial assurance, with the additional funds collected being held by utilities. As discussed at the May 31 technical conference, Direct Energy does not support this option. In our view, the POR discount should be reserved only for its originally intended purpose, namely compensating the utility for the expected level of uncollectible expenses it incurs in billing and collecting for ESCO charges under New York's utility consolidated billing/POR regime.[9]

II. COMMENTS ON STAFF REFERENCE PRICE PROPOSAL

Direct Energy opposes Staff's reference price proposal on multiple grounds. The proposal is inconsistent with Federal and State law, is not based on any facts in the record or the

[7] In its comments, Direct Energy recommended a requirement of a bond in the amount of $1 million for ESCOs who certify that they are not engaged in door-to-door or outbound telemarketing sales to mass market customers, and $3 million for ESCOs who do plan to use those sales channels.

[8] A copy of those comments is attached as Appendix A to these comments.

[9] Direct Energy expects to address in its reply comments any concerns raised by parties with respect to the efficiency of performance bonds as the vehicle for a financial assurance requirement imposed on ESCOs.

well-reasoned application of State law to any such facts, and suffers from a number of analytical, factual and operation flaws.

A. The Federal Antitrust Laws Preempt State Actions Restricting Competition Except Where The State Acting As Sovereign Has Adopted An Affirmatively-Expressed Policy Of Displacing Competition

In *Standard Oil Co. v. Federal Trade Commission*, the United States Supreme Court recognized that "[t]he heart of our national economic policy long has been faith in the value of competition."[10] Seven years later in *Northern Pacific R. Co. v. United States*, the Court explained that the Sherman Act[11] made this "national economic policy" the law of the land:

> The Sherman Act was designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade. It rests on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality, and the greatest material progress, while at the same time providing an environment conductive to the preservation of our democratic political and social institutions. But even were that premise open to question, the policy unequivocally laid down by the Act is competition.[12]

Section 1 of the Sherman Act protects competitive markets by prohibiting all "contracts, combinations . . . and conspiracies in restraint of trade."[13] The Supreme Court has consistently found all agreements that raise, lower, stabilize or otherwise set prices charged by competing businesses to be unlawful per se under this standard.[14] This is even true where, as in this case, the agreement would set maximum rather than minimum prices, as the Court made clear in

[10] 340 U.S. 231, 248 (1951).

[11] 15 U.S.C. §§ 1 and 2.

[12] 356 U.S. 1, 5-6 (1958).

[13] 15 U.S.C. § 1.

[14] *See, e.g., United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 224 n.59 (1940); *FTC v. Superior Trial Lawyers Ass'n*, 493 U.S. 411, 421-23 (1990).

striking down an agreement capping prices for certain types of medical care in *Arizona v. Maricopa County Medical Society*:

> Our decisions foreclose the argument that the agreements at issue escape per se condemnation because they are horizontal and fix maximum prices. *Kiefer-Stewart* and *Albrecht* place horizontal agreements to fix maximum prices on the same legal -- even if not economic -- footing as agreements to fix minimum or uniform prices. The per se rule is grounded on faith in price competition as a market force and not on a policy of low selling prices at the price of eliminating competition.[15]

See also Kiefer-Stewart Co. v. Joseph E. Seagram & Sons, 340 U.S. 211, 213 (1951)("[A]greement[s] among competitors to fix maximum resale prices of their products . . . no less than those to fix minimum prices, cripple the freedom of traders and thereby restrain their ability to sell in accordance with their own judgment.“). Thus, there can be no doubt that a private agreement capping ESCO prices would constitute a clear violation of § 1 of the Sherman Act.

While the Court has recognized that the Sherman Act was not intended to restrict the right of the States to adopt policies that restrain competition when acting in their capacity as sovereign, the Court recently stated that "given the fundamental national values of free enterprise and economic competition that are embodied in the Sherman Act, state-action immunity is disfavored, much as are repeals by implication."[16] To this end, the Court has held that where a state seeks to displace federally protected competitive markets with state regulation, two requirements must be met to avoid Sherman Act preemption:

> [Our] decisions establish two standards for antitrust immunity under *Parker v. Brown*. First, the challenged restraint must be "one clearly articulated and affirmatively expressed as state

[15] 457 U.S. 332, 348 (1982) (footnote and internal quotation omitted). ;

[16] *Federal Trade Commission v. Phoebe Putney Health Sys.*, 133 S.Ct. 1003, 1010 (2013) (internal quotation omitted).

> policy"; second, the policy must be "actively supervised" by the State itself.[17]

Where either of these requirements is not met, the state program restricting competition must fall to the national economic policy of competition expressed in the federal antitrust laws.[18]

The federal courts have rejected attempts by state agencies to restrain competition in a number of cases where the courts found that the state the acting in its capacity as sovereign had not adopted an affirmatively-expressed policy to displace competition. For example, in *Kay Elec. Coop. v. City of Newkirk*, the court found that “there's nothing on Oklahoma's statute books to suggest that the legislature authorized the species of antitrust violation alleged here -- refusing to provide an end customer one service (sewage) unless he purchased something entirely different (electricity).”[19] Similarly, In *Shames v. Cal. Travel & Tourism Commission*, the court held that the fact that the State of California authorized the California Travel & Tourism Commission (“CTTC”) to supervise rental car companies and to recover its costs of operation through a surcharge on those rental companies did not grant immunize the CTTC from a claim that it violated the federal antitrust laws by attempting to regulate the manner in which those car rental companies passed such fees through to consumers.[20] In *Ticket Center, Inc. v. Banco*

[17] *Cal. Liquor Dealers v. Midcal Aluminum, Inc.*, 445 U.S. 97, 105 (1980).

[18] Until recently, the Commission too has followed a policy of favoring competition and market mechanisms. The Commission’s failure to date to clearly explain its reasons for departing from this established policy also renders its decision to deprive ESCOs of the pricing freedom required for the proper operation of competitive markets arbitrary and capricious in violation of section 7803(3) of New York’s Civil Practice Laws and Rules. *See Charles A. Field Deliver Service, Inc. v. Roberts*, 66 N.Y.2d 516, 520 (1985)(“[W]hen an agency determines to alter its prior stated course it must set forth its reasons for doing so. Unless such an explanation is furnished, a reviewing court will be unable to determine whether the agency has changed its prior interpretation of the law for valid reasons, or has simply overlooked or ignored its prior decision. Absent such an explanation, failure to conform to agency precedent will, therefore, require reversal on the law as arbitrary, even though there is in the record substantial evidence to support the determination made.”)(citations omitted).

[19] 647 F.3d 1039, 1047 (10th Cir. 2011), *cert. denied*, 132 S.Ct. 1107 (2012).

[20] 626 F.3d 1079, 1085 (9th Cir. 2010) (“Even though the ultimate economic result of the legislation may be foreseeable (i.e., that rental car companies would raise their rates to offset the 2.5% assessment), the alleged anticompetitive conduct—that the CTTC facilitated a collusive agreement among rental car companies to uniformly pass through these charges to consumers and ensured rogue companies adhered to the agreement—is not a ‘natural

Popular De Puerto Rico, the court rejected the claim that a grant of broad powers to promote economic development was sufficient to immunize conduct claimed to violate the antitrust laws.[21]

B. New York Has Not Adopted An Affirmatively-Expressed Policy Of Displacing Competition In Markets For ESCO Services

Any analysis of the scope of the Commission's powers must begin with the oft-cited fact that "[t]he Public Service Commission possesses only those powers expressly delegated to it by the Legislature, or incidental to its expressed powers, together with those required by necessary implication to enable the Commission to fulfill its statutory mandate."[22] For the reasons set forth below, these limited powers do not extend to the displacement of competition in markets for retail energy supply services furnished by ESCOs.

1. The PSL Expresses An Affirmative State Policy Of Displacing Competition Only Among Franchised Utilities Occupying The Public Streets And Places.

The Court of Appeals recognized over 100 years ago that the PSL represented an affirmatively-expressed state policy "arising through an extended and instructive experience to withdraw the unrestricted right of competition between corporations occupying through special consents or franchises the public streets and places."[23] The PSL establishes a comprehensive statutory scheme for the regulation of franchised utilities, as the United States District Court for the Northern District of New York noted in *Capital Telephone Company v. Schenectady*, which involved the provisions of the PSL applicable to telephone companies regulated by the Commission under Article V of the PSL:

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and foreseeable' result of the limited power granted to the CTTC.").

[21] 441 F. Supp.2d 354, 357 (D.P.R. 2006) ("It is a far stretch to conclude that general language on economic development and broad executory functions are sufficient to fall into the 'clearly articulated' category.").

[22] *Niagara Mohawk Power Corp. v. Public Service Com.*, 69 N.Y.2d 365, 368-69 (1987).

[23] *People ex rel. New York Edison Co. v. Willcox*, 207 N.Y. 86 , 98-99 (1912).

> Under New York State's statutory scheme, any enterprise seeking to establish a telephone service must first obtain the consent of the municipality in which it intends to operate. Having done so, the enterprise must [**2] then obtain a certificate of "public convenience and necessity" from New York's Public Service Commission.
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> That statute provides inter alia, that the Public Service Commission, in accordance with the provisions of New York Public Service Law § 94(2): shall have general supervision of all . . . telephone corporations . . . and telephone lines within its jurisdiction . . . and shall have power to and shall examine the same and keep informed as to their general condition, their capitalization, their franchises and the manner in which their lines and property are leased, operated or managed, conducted and operated with respect to the adequacy of and accommodation afforded by their service and also with respect to the safety and security of their lines and property, and with respect to their compliance with all provisions of law, orders of the commission, franchises and charter requirements. Section 95 of the Public Service Law provides that telephone corporations shall submit verified annual reports to the Commission. Section 96 outlines the investigatory powers of the Commission with respect to telephone corporations, and §§ 100-101(a) grant the Commission broad powers in regulating the corporate financial structure of telephone service providers.[24]

Based on these findings, the court in Capital Telephone found that the PSL established a clearly articulated and affirmatively expressed state policy of displacing competition.[25]

The powers over franchised gas and electric utilities granted to the Commission in Article IV of the PSL are substantially identical to those applicable to telephone companies under PSL Article V. Thus, the Commission's regulation of franchised electric and gas utilities clearly qualifies for a state action immunity from the requirements of the Sherman Act. Importantly, however, the broad regulatory powers described above are limited by their terms to electric, gas, and telephone (and water and steam) utilities operating distribution facilities in the public streets

[24] 560 F. Supp. 207, 208-09 (N.D.N.Y.1983).

[25] 560 F. Supp. at 210.

and places under certificates of public convenience and necessity issued by the Commission under the PSL. PSL § 53 does authorize the Commission to regulate ESCOs' compliance with the requirements of the Home Energy Fair Practices Act ("HEFPA"), but nothing in HEFPA purports to authorize the Commission to displace competition by limiting new entry or by regulating the prices, services, or the financial structure of ESCOs.[26] Thus, any attempt by the Commission to regulate or displace competition among ESCOs is beyond the narrow area within which the Legislature has expressly "withdrawn the unrestricted right of competition between corporations occupying through special consents or franchises the public streets and places" and must therefore conform with the "national economic policy of competition" expressed in the Sherman Act.

2. The Commission Has Consistently And Correctly Ruled That Its Regulatory Authority Under Part IV Of The PSL Does Not Extend To ESCOs.

The Commission has consistently recognized that ESCOs are not franchised electric and gas corporations subject to regulation under Part IV of the PSL. For example in Opinion No. 97-17, the Commission rejected claims by the Public Utility Law Project ("PULP") that ESCOs should be regulated as franchised electric companies under Part IV of the PSL:

> PULP's assertion that ESCOs are electric corporations and therefore must be subject to PSL Article 4 regulation is incorrect. PSL §66(1) provides that our general supervisory duties normally extend to those electric corporations that have "authority . . . to lay down, erect or maintain wires, pipes, conduits, ducts or other fixtures in, over or under the streets, highways and public places . . . ." Opinion No. 97-5 addresses ESCOs that do not lay, erect or

[26] Indeed, the fact that the Legislature amended the PSL to make ESCOs subject to HEFPA but refrained from also subjecting ESCOs to the requirements of PSL Article IV clearly demonstrates that the Legislature did not intend to displace competition in markets for ESCO services. *Cf. Capital Tel. Co. v. Schenectady*, 560 F. Supp. 207, 210 n.6 (N.D. N.Y. 1983)("Moreover, as additional evidence of New York State's policy to displace competition with regulation in the provision of telephone services, this Court notes that application of the provisions of Article V of the Public Service Law has been suspended with respect to telegraph companies, but left in force with respect to telephone companies.").

> maintain wires, pipes, conduits ducts or other fixtures in, over or under public property.
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> PULP has cited no reported cases holding that the PSC must regulate directly entities that do not own, operate, lease, lay down, erect or maintain wires, pipes, conduits, ducts or other fixtures in, over or under public property.[27]

Similarly, in Case 09-G-0289, the Commission ruled that: "[I]t is well understood that we lack authority to regulate the rates that an ESCO charges any customer (residential or nonresidential). Therefore, neither an informal hearing officer nor the Commission may determine that an ESCO's charges to its customer is improper."[28]

The Commission implicitly reaffirmed its finding that ESCOs do not fall within the ambit of the Commission's jurisdiction under PSL Article IV in the February 23, 2016 Order when it held that ESCOs are not required to obtain a Certificate of Public Convenience and Necessity ("CPCN") under PSL § 68 before commencing operations in New York State.[29] Because PSL § 68 requires all electric and gas corporations to obtain a CPCN before commencing the construction of any electric or gas plant or exercising any franchise in New York, this Commission holding makes clear that ESCOs neither own nor operate electric or gas plant in New York State as defined in PSL §§ 2(10) and 2(12) and, hence, cannot be regarded as electric or gas corporations under PSL §§ 2(11) and 2(13). Moreover, as the Commission noted in

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[27] Case 94-E-0952, *In the Matter of Competitive Opportunities Regarding Electric Service*, Opinion And Order Deciding Petitions For Clarification And Rehearing, slip op. at 33-34 (Issued and Effective: November 18, 1997) ("Opinion No. 97-17")

[28] Case 09-G09289, *In the Matter of the Rules and Regulations of the Public Service Commission, Contained in 16 NYCRR, in Relation to Complaint Procedures—Appeal by Ms. Laura Jacobson of the Informal Decision Rendered in Favor of MX Energy (727550)*, Commission Determination (Issued and Effective August 23, 2010).

[29] Case 15-M-0127, *In the Matter of Eligibility Criteria for Energy Service Companies,* Order Resetting Retail Energy Markets And Establishing Further Process, slip op. at 10-11 (Issued and Effective February 23, 2016) ("Under the interpretation of PSL requirements adopted in Opinions 97-5 and 97-17, ESCOs are not required to obtain any certificate, permit or any other approval required by law. Most notably, ESCOs have not been required to obtain a Certificate of Public Convenience and Necessity (CPC&N) under PSL §68.").

Opinion No. 97-17, the Commission's jurisdiction over ESCOs is further restricted by PSL § 66(1), which limits the Commission's jurisdiction under PSL Article IV to gas and electric corporations "having authority under any general or special law or under any charter or franchise to lay down, erect or maintain wires, pipes, conduits, ducts or other fixtures in, over or under the streets, highways and public places."[30]

Because these uncontested jurisdictional facts make clear that ESCOs cannot be classified as franchised electric or gas corporations subject to rate regulation under the provisions of Article IV of the PSL, the Commission lacks authority to regulate ESCO prices under the PSL and must therefore harmonize any actions it takes with respect to ESCO pricing with the national economic policy of competition established in the Sherman Act. At a minimum, therefore, the Commission must refrain from fixing or establishing any schedule of maximum prices for ESCO services as proposed in the Reference Price Whitepaper.

C. Alternatively, The Terms And Conditions For ESCO Service Proposed In The Reference Price Whitepaper Are Unjust And Unreasonable In Violation Of The Requirements Of The PSL

If the Commission ultimately finds on the basis of substantial record evidence that ESCOs do operate electric plant and gas plant in New York State and are therefore subject to its jurisdiction under the PSL as franchised electric and gas corporations, then the price cap on ESCO fixed-price offerings in the Reference Price Whitepaper would clearly be unlawful as proposed. While the PSL gives the Commission the power to regulate the price and service offerings of franchised electric and gas corporations, PSL §§ 66(5) and 72 both require that the Commission to hold a public hearing to do so and that any rates, terms and conditions

[30] N.Y. Pub. Serv. L. § 68(1) (McKinney 2011).

established by the Commission for that utility be in all respects just and reasonable. PSL § 72 provides, in pertinent part, that:

> After a hearing and after such an investigation as shall have been made by the commission or its officer, agents, examiners or inspectors, the commission, may, by order, fix just and reasonable prices, rates and charges for gas or electricity to be charged by such corporation or person, for the service to be furnished . . . . [31]

The Reference Price Whitepaper makes no provision for the Commission to conduct the evidentiary hearing required to set just and reasonable rates for ESCO fixed-price service under PSL §§ 66(5) and 72. As a result, Staff's reference price proposal will not accurately reflect the costs of service of any ESCO, as Direct Energy explains below and in the attached Intelometry Report. As the United States Supreme Court made clear in *Federal Power Commission v. Hope Natural Gas Company*, utility rates must be set at levels that will provide the regulated entity with a reasonable opportunity to recover its costs and earn a return on its capital dedicated to serving the public sufficient to maintain its credit and to attract new capital. Any failure by the Commission to make the findings required to demonstrate that the rates proposed in the Staff Whitepaper satisfy this standard would constitute a taking of private property without just compensation in violation of the Fifth Amendment to the United States Constitution.[32]

D. Staff's Reference Price Proposal Contains a Number of Analytical and Operational Flaws That Require Its Rejection by the Commission

Even if Staff's reference price proposal did not violate Federal and State law, it would still not be suitable for adoption by the Commission. The proposal suffers from many flaws in

[31] N.Y. Pub. Serv. L. § 72 (McKinney 2011).

[32] 320 U.S. 591, 603 (1943)("The rate-making process under the Act, i. e., the fixing of 'just and reasonable' rates, involves a balancing of the investor and the consumer interests. . . . From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.") (citations omitted).

both its conception and its execution. In order to describe these flaws in sufficient detail to inform the Commission's action on this matter, Direct Energy retained the services of Guy Sharfman, a principal of Intelometry, Inc., a Houston-based consulting firm with considerable expertise and experience in the retail pricing of electricity and natural gas for competitive suppliers. Mr. Sharfman thoroughly reviewed the Reference Price Whitepaper and prepared a report of his findings, which is attached as Appendix B to these comments. We will briefly summarize some of Mr. Sharfman's findings and make other observations about the substance of the Staff reference price proposal.

1. The Reference Price Whitepaper provides no rational basis for regulating ESCO fixed-price service.

Even where a state agency does have appropriate statutory authority to regulate in a particular area, it cannot do so in an unfettered manner. An agency's determinations cannot be arbitrary or capricious:

> The arbitrary or capricious test chiefly "relates to whether a particular action should have been taken or is justified * * * and whether the administrative action is without foundation in fact." Arbitrary action is without sound basis in reason and is generally taken without regard to the facts. In *Matter of Colton* v. *Berman* this court said "the proper test is whether there is a rational basis for the administrative orders, *the review not being of determinations made after quasi-judicial hearings required by statute or law*."[33]

Measured against this standard, Staff's reference price proposal for ESCO fixed-price service is, if anything, more infirm than the February 23 Order's regulation of monthly variable prices. While ESCOs disagreed with the Commission's assertion that the monthly variable utility default rate should be the yardstick against which ESCO monthly variable prices should

[33] *In the Matter of Edwin A. Pell, Jr., Respondent-Appellant, v. Board of Education of Union Free School District No. 1 of the Towns of Scarsdale and Mamaroneck, Westchester County, Appellant-Respondent*, 34 N.Y.2d 222, 231 (1974) (citations omitted, emphasis in original).

be measured, it was at least possible to discern the Commission's reasoning, which we believe went something like this: "The utility already offers monthly variable pricing so the only way for an ESCO's monthly variable service to 'add value' would be for it to offer savings versus the utility rate." Again, ESCOs do not agree with this assessment, and continue to believe that it exceeded the Commission's regulatory authority, but there is at least a hint of internal logic to it, and the Commission cited evidence that it (mistakenly) believes supported its finding that customers on monthly variable ESCO service have, in many instances, paid more than they would have if they had remained with the utility.

There is no such internal logic to Staff's proposal to regulate ESCO fixed-price offers. First, there is general agreement (memorialized, for example, in the Department's report on the low-income collaborative) that fixed-price products are "value-added." The Reference Price Whitepaper itself states that "a fixed-price product could provide value to customers who are looking to lock in a budget and/or insulate themselves from price spikes."[34] It is also well established that franchised electric and gas utilities do not offer fixed-price service to mass market customers. Moreover, on the Power to Choose website, for one area code in Westchester County (10504, chosen at random) there are currently 88 offers for fixed-price electric service to residential customers. These include several dozen 12-month offers, and other offers with terms up to 36 months. These offers are all generally available and publicly posted on the Commission's own website, where customers can easily compare difference features and terms of the offers in order to decide if one meets their needs.

Nonetheless, despite the fact that fixed-price offers are clearly "value-added," are not available from the utility, are available in abundance in the market (88 offers in one zip code!)

[34] Reference Price Whitepaper at 1.

and can be easily compared by customers for their relative value, based on price and other considerations, the Reference Price Whitepaper jumps to the conclusion that the fixed-price market in New York should be governed by price controls. Staff's proposal to price-regulate fixed-price ESCO service comes so early in the Reference Price Whitepaper that it is not even accurate to say that Staff jumps to that conclusion; the need to regulated fixed-price service appears to be a foundational premise of the proposal. The goal of creating a price cap for fixed-price service is stated even before Staff acknowledges that fixed-price service "could provide value to customers." The preceding sentence states: "Staff is proposing a formula for determining an appropriate not to exceed benchmark 'reference price' for a 12-month fixed-price offering."[35]

In short, neither the February 23 Order nor the Reference Price Whitepaper makes any factual findings regarding the competitiveness of the market for fixed-price service in the residential and small business sectors that would support the recommendation that fixed-price service should be subject to a price cap.[36] There is no discussion of the number of fixed-price offers available, even though, as stated above, this information is gathered on the Commission's own website, pursuant to the Commission's own rules. Neither the February 23 Order nor the Reference Price Whitepaper even addresses the question of whether the market for 12-month fixed-price service has produced "just and reasonable rates." Rather, the Reference Price Whitepaper merely states that "the purpose of this reference price formula is to establish a just

[35] Reference Price Whitepaper at 1.

[36] At the May 31, 2016 technical conference, Staff stated their belief that at one time there were few fixed-price offers in the market and that while there were more now, there still appeared to be many variable price offers. It is possible that this is true for some utility service territories, but at least for Westchester County there are currently 88 fixed-price offers, compared to 52 variable price offers.

and reasonable per kilowatt-hour price for a 12-month fixed-price supply product," and proceeds from there.

This assertion implies that the prices for fixed-price service currently being charged, or that have been charged in the past, may not be "just and reasonable," but Staff presents no evidence on this point whatsoever. Staff conceded at the technical conference that, with respect to the cumulative differences between ESCO prices and utility default rates that have occasionally been cited by Staff, they have not differentiated between fixed-price and variable priced service, nor have they examined whether any positive difference between fixed-price service and utility default prices did or did not represent a fair premium for fixed-price service over the monthly variable utility default rate. Staff also conceded that, with respect to the reference price for electric service, they had done no "back-casting" to compare the price produced by the reference price formula to then-extant fixed-price offers. It is essential to undertake such an exercise either for the purpose of testing the robustness of one's own model (if one believed the market was producing "just and reasonable" fixed-price offers) or to test whether there might be a market failure with respect to ESCO fixed-price offers (if one were already confident in the robustness of one's pricing model).[37]

In the absence of any evidence whatsoever about the state of the market for fixed-price service in New York, a recommendation that the market should be subject to a "not to ebenchmaxceed rk 'reference price'" (or "price cap," in plain English) is arbitrary and capricious and should be rejected by the Commission.

[37] Staff produced no sample price reference prices for natural gas service, as they had not arrived at specific values for some components of their pricing formula.

2. The Reference Price Whitepaper's proposed approach for implementing the reference price would severely limit ESCO offerings and hurt customers.

The Reference Price Whitepaper proposes to establish a not-to-exceed 12-month reference price on a monthly basis, six weeks in advance of the first month of the 12-month period for which the price cap would be in effect. Thus, for example, on approximately April 16, Staff would produce a not-to-exceed price for 12-month fixed-price contracts that would begin on June 1. Offers that began in June and ran through May of the following year and that were priced at or below the price cap would be deemed lawful; prices in excess of the cap would be "subject to staff review and possible compliance action."

At the technical conference, ESCO representatives pointed out the many deficiencies in this approach.[38] For example, many customers – especially the small business customers that the Commission has inexplicably included in the price cap proposal – contract with ESCOs well in advance of six weeks before the start date of the contract. This is true both for new contracts and especially true for renewals. Customers whose current contracts will expire on May 31 may be shopping for new offers in February or March rather than waiting until April 16.[39] If the proposal in the Reference Price Whitepaper is adopted, ESCOs will not know what price will be deemed lawful for a June 1 start date until April 16. As a result, it would be exceedingly risky for ESCOs to make any offers before that date. ESCOs would also typically be making renewal offers to customers with contracts expiring on May 31 well before April 16 but again, under the Reference Price Whitepaper proposal, doing so would subject the ESCO to the risk that changes in market conditions occurring between the time when the offer is made and accepted and when

[38] Mr. Sharfman's analysis addresses these deficiencies as well.

[39] Business customers in particular may shop many months or even a year or two in advance in some market conditions.

the new price cap comes out on April 16, the agreed-upon price will exceed the cap and thus subject the ESCO to "staff review and possible compliance action."

The price cap proposal in the Reference Price Whitepaper would also limit customer options in the six-week period after the new price cap is announced and the beginning of the 12-month period during which the cap would be in effect. As discussed at the May 31 technical conference (and as demonstrated in Mr. Sharfman's report), the wholesale market prices on which ESCO fixed-price retail offers are based can change dramatically in a short period of time. If the market runs up shortly after the new price cap is calculated, ESCOs might not be able to make any fixed-price offers until the next price cap is calculated in the following month.[40]

This approach – in which ESCOs could make no offers more than six weeks before the proposed start date of 12-month contracts and might find themselves limited in their ability to make offers even during the six weeks after the price cap is announced – does nothing but hurt customers. Ironically, the customers it hurts most are those who are the most informed and who actually plan ahead in shopping for their energy needs. The proposal also punishes ESCOs who are trying to help customers plan ahead by getting renewal offers out well in advance of contract expiration. This is an especially puzzling result considering that the phenomenon of customers coming to the end of a fixed term and rolling to monthly variable service is perceived by some to be an undesirable feature of retail power and gas markets. Wouldn't the Commission want to encourage ESCOs to make renewal offers earlier rather than later to help more customers

[40] It is also possible that if the market drops after the new price cap is announced that ESCOs may be more reluctant to lower the price of their 12-month offers than they would be in the absence of a price cap, as the price cap can foster a tacit understanding among ESCOs to charge prices no lower than the highest price allowed. As discussed above, this is one of the reasons why price caps as well as price floors and other forms of price setting are prohibited by the Sherman Act in the absence of a valid state action immunity.

avoiding moving to variable service? This proposal makes that otherwise prudent business practice impossible.[41]

Furthermore, limiting fixed-price offers to 12-month terms only also limits choice and hurts customers. As shown on the Commission's own Power to Choose website, many ESCOs are offering fixed-price service for terms well beyond 12 months, some for as long as 36 months. Many customers – again, especially small business customers – prefer to lock in prices for as long as possible, especially when they perceive that market prices are low and might be likely to move higher in the future. Again, there is much irony in the fact that current market conditions, in which prices are at historical lows and some customers could reasonably wish to lock in prices for periods longer than 12 months.[42]

Finally, Direct Energy strongly opposes Staff's proposal to disaggregate any value-added components of fixed price service from the commodity component, as stated in the Reference Price Whitepaper: "The fixed price offering could be a standalone product or could be coupled with an energy related value added product, **the price of which would be bundled with the per unit commodity costs but separately disclosed in the customer disclosure statement, including the price of that product**."[43] This proposal fails to recognize the manner in which

[41] At the May 31 technical conference, Staff clearly recognized the shortcomings of a creating not only a price cap but a shopping window outside of which customers would not be able to find fixed-price offers. But their response appeared to be limited to asking ESCOs to propose some alternative to the six week period. For our part, Direct Energy cannot in good faith suggest any alternative to announcing a price cap six weeks in advance of the 12-month period in which it would be in effect because (1) we believe the price cap is unlawful, and (2) even if it were not, it is simply bad policy, regardless of how far in advance the next price cap is announced.

[42] A further problem with the Reference Price Whitepaper proposal is presented by the fact that the price cap would operate on a straight calendar year basis – for example, it would be in effect for offers running from June 1 through May 31 of the following year – while customer contracts actually start at different times during the month, corresponding to their utility billing date. Thus, for example, ESCOs signing customers to offers during the first week after the new price cap was announced would have to hold those enrollments to ensure that the customer's service did not start in the current month, which would make the contract subject to a previous price cap. These customer enrollment and switching issues are discussed further in Mr. Sharfman's report.

[43] Reference Price Whitepaper at 1-2 (emphasis supplied).

ESCOs bundle and price value-added services to consumers. It is typically not done on an a la carte basis, especially for mass market customers, any more that the individual components of full requirements service are priced on a disaggregated basis for such customers. As discussed at one of the collaborative meetings on this topic, ESCOs have a broad range of business models and a diverse set of strategies to bring value to customers. These business models and strategies address different stages of the customer relationship, from sign-up to retention to winning back customers who may have switched away. Addressing these business goals and the over-riding imperative to bring value to customers requires a flexible approach that rarely (if ever) involves simply tacking on an extra widget and adding the unit cost of that widget to what would otherwise have been a commodity-only price. For example, Direct Energy offers a large number of customers in service territories with full smart meter deployment an itemized bill through a feature called "Direct Your Energy." We consider this kind of itemization, and the related customer communications that come with it, to be "value-added" but there is no separate charge for it and any attempt to create a separate charge would be a state-imposed fiction that would only mislead customers and make the process of evaluating their options more difficult. This would be especially antithetical to New York's broader energy policy goals of increasing reliance on distributed energy resources and decarbonizing the energy economy. Achieving these goals will require creativity and flexibility in creating and marketing innovative options for consumers at all levels of the market. Policies like those described in the Reference Price Whitepaper will only stifle innovation and make it much less likely that New York will reach these broader goals.

There is no way to fix these problems with the Staff proposal. Imposing a price cap of any kind, regardless of how far from or close to the start date it is announced, hurts customers, especially when it is limited to offers of 12 months duration. This is why Direct Energy recommends that the Staff proposal be rejected in favor of reliance on competitive forces, in conjunction with further efforts to educate consumers about the key elements of the energy markets in New York.

3. Even if the concept of a price cap for fixed-price service were lawful and a good idea (which it is not), the Reference Price Whitepaper proposal has factual gaps and analytical limitations that render it inappropriate for adoption by the Commission.

The core of the Reference Price Whitepaper is two formulas for calculating price caps for 12-month fixed-price electric and natural gas service. These formulas have a number of factual gaps and analytical flaws, which are detailed in Mr. Sharfman's report. We will highlight just a few of them here:

- The "energy multiplier" factor of the electric rate cap formula intended to cover "load following, losses, unaccounted for energy and ancillary services" consists of two components, both of which are flawed:
  - The energy load following adjustment was set at 10 percent of the "base energy price" without any description or documentation of how that amount was arrived at;
  - The same is true of the 20 percent adjustment to account for "tariffed energy losses, unaccounted for energy, and ancillary services (including uplift)." Neither the whitepaper nor the May 31 technical conference revealed any detail for this component or documentation for how it was arrived at.
  - The whitepaper states that either of those components would be "updated based on need," although it was not clear what "need" would result in those factors being updated or what the process might be for doing the updating.

- The "risk premium to cover ESCO customer acquisition, financing, labor, POR costs, taxes" was set at 2 cents/kWh, but neither the whitepaper nor the May 31 technical conference provided any numerical breakdown of the components that summed to 2 cents/kWh. At the technical conference Staff did reveal that the 2 cents/kWh adder was intended to include profit as well as the other components mentioned above. Without any documentation of how this figure was derived it is impossible to determine whether the proposed reference price would result in "just and reasonable" fixed-prices.
- The gas price cap formula contains a "Factor P" to account for supplier margin and MFC related costs, including purchase of receivables and billing. No actual figure was provided for this factor, and Staff does not explain how the figure would be determined. Moreover, while Staff did state at the May 31 technical conference that "P" was intended to include a reasonable rate of return for ESCOs, neither the Reference Price Whitepaper nor the technical conference revealed how Staff would determine what a reasonable rate of return for ESCOs would be. Like some of the other opaque factors in the electric price cap formula, "P" would be "decided periodically by the PSC, based on need."
- Finally, the gas price cap formula contains a "Factor M," which was described as a "factor to limit price gouging." Staff provides no other description of "M" or how it would be calculated.

These gaps and analytical flaws would, alone, be sufficient to justify rejection of the Reference Price Whitepaper's rate cap proposal. Taking these flaws and the legal and policy infirmities discussed above into account, the only reasonable option for the Commission is to reject that proposal in its entirety.

Respectfully submitted,

/s/

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Dated: June 6, 2016

APPENDIX A

DIRECT ENERGY

MARCH 11, 2016 COMMENTS ON

PERFORMANCE BONDS

BEFORE THE
NEW YORK STATE PUBLIC SERVICE COMMISSION

In the Matter of Eligibility Criteria for Energy Service Companies.	**Case 15-M-0127**
Proceeding on Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-Residential Retail Energy Markets in New York State.	**Case 12-M-0476**
In the Matter of Retail Access Business Rules.	**Case 98-M-1343**

INITIAL COMMENTS OF DIRECT ENERGY SERVICES, LLC

In its February 23, 2016, Order Resetting Retail Energy Markets and Establishing Further Process, the Commission addressed issues of serious concern to all participants in the retail energy market in New York. The Commission also issued a Request for Comments as a companion to the Order, in which the Commission sought further input from parties so that it could "consider what long-term conditions should be implemented for energy service company (ESCO) eligibility and conditions of service to residential and small non-residential customers (mass market customers)." Direct Energy Services, LLC, on behalf of itself and its affiliates doing business as energy service companies ("ESCOs") in New York State (collectively, "Direct Energy"),[1] respectfully submits these initial comments in response to the Request.

Direct Energy is committed to finding workable solutions to the concerns raised in the Order so that the market can deliver to customers all of the value that it is capable of delivering.

[1] Direct Energy's affiliates doing business in New York State include Bounce Energy NY, LLC; Energetix DE, LLC; Gateway Energy Services Corporation; NYSEG Solutions, LLC; Direct Energy Business, LLC; and Direct Energy Business Marketing, LLC.

We believe such solutions are readily available to the Commission. Direct Energy encourages the Commission and the parties to this proceeding to work toward finding these solutions as quickly and efficiently as possible. In our view, this means finding solutions to the most pressing problems first so that the ESCO community can win the trust of the consumers we serve and seek to serve and also to win the trust of other stakeholders who have raised concerns about the manner in which some ESCOs currently operate in New York. Once the most pressing issues are resolved in a way that allows the market to move forward, the Commission and other stakeholders can move on to the other issues of concern.

Direct Energy believes that the most urgent issue facing the market is the need to give New Yorkers a clear signal that ESCOs who operate in New York can be trusted, and that those ESCOs have the financial wherewithal both to keep the promises they make to their customers and to make things right if they ever fall short. A financial assurance requirement for all ESCOs should go a long way toward restoring consumer trust in the market in the near term, before moving on to address the other issues in the Request for Comments.

There are two reasons to address the financial assurance issue immediately. First, it is a reasonable feature of a competitive retail energy market that is noticeably absent from New York's regulatory regime. Being able to meet some threshold of financial assurance sends a signal to the market that an ESCO is capable of raising some minimum amount of capital to operate in a complex and capital-intensive business. States with well-functioning retail markets, such as Pennsylvania and Texas, require a minimum financial threshold for retailer suppliers, and there is no evidence that this requirement has had anything but a salutary effect on the market in those states.[2] Second, if the Commission's enforcement measures are to be effective,

[2] Texas also has detailed, stringent technical and managerial requirements that retailer suppliers must meet in order to gain authority to provide retail electricity service in the State. The Commission could consider enhanced

an ESCO should be able to give some reasonable assurance that if it violates the Commission's regulations the ESCO will be able both to pay any penalty assessed by the Commission and to make customers whole for any loss caused by the violation. Because the need to establish a reasonable bonding requirement is so pressing, we encourage the Commission to address it in the first collaborative meeting with stakeholders on March 15. In Direct Energy's view, an appropriate financial assurance requirement would have two tiers: $1 million for ESCOs who certify that they are not engaged in door-to-door or outbound telemarketing sales to mass market customers, and $3 million for ESCOs who do plan to use those sales channels.[3] An enhanced financial assurance requirement for ESCOs using sales channels with a particularly high customer touch, especially door-to-door sales, which brings a sales agent in close physical proximity to a potential customer, is totally appropriate. While these channels can be very effective in educating customers about products and services an ESCO is offering, they also carry a higher risk of both inadvertent misunderstandings and intentional misconduct. ESCOs that want to take advantage of the closer customer interactions in those channels must also provide assurance against the risks that come with those interactions.

Our focus on the need for a financial assurance requirement does not mean that we see the other issues in the Request for Comments as unimportant, or that we do not have views on those topics. Rather, it reflects our belief that the Commission should work with stakeholders to prioritize the issues before it and work through those issues in a serial fashion, and our belief that the financial assurance issue is the best issue to start with. To facilitate such a serial process, we

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requirements in these areas for an ESCO to maintain its ability to do business in New York.

[3] The proposed financial assurance requirement would attach severally to each ESCO operating in the New York market. Thus, for example, a corporate entity with three ESCO subsidiaries, two of which are engaged in door-to-door sales, would arrange for two $3 million bonds or parental guarantees (one for each of the two ESCOs engaged in door-to-door sales) and one $1 million bond or parental guarantee. The form of financial assurance allowed to meet this requirement should be one of the topics discussed at the first collaborative meeting, which will be held on March 15.

would also encourage the Commission to keep the comment period open in this proceeding, allowing parties to file comments on a rolling basis, either identifying the issues that they believe should be covered next in the process or expressing their views on the issues that have been raised in each of the stakeholder meetings scheduled in this matter. We believe this approach will allow Staff to efficiently manage what could otherwise be an unwieldy process if all of the issues identified in the Request for Comments are addressed at once.

Direct Energy appreciates the opportunity to submit these comments and looks forward to working with the Commission and other stakeholders to take the actions necessary to move the retail energy market in New York forward.

Respectfully submitted,

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Dated: March 11, 2016

APPENDIX B

INTELOMETRY REPORT

Intelometry, Inc.

Comments on the New York Public Service Commission Staff Whitepaper on Benchmark Reference Prices

Prepared on behalf of Direct Energy

This document provides comments on a whitepaper prepared by the New York Public Service Commission Staff that seeks to impose price caps on fixed price energy products in New York

intelometry

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Comments on the New York Public Service Commission Staff Whitepaper on Benchmark Reference Prices

I. Introduction

In response to the New York Public Service Commission ("Commission") Order Resetting Retail Energy Markets and Establishing Further Process ("Reset Order") the Commission Staff ("Staff") has produced a whitepaper that proposes a "*formula for determining an appropriate not to exceed benchmark "reference price" for a 12-month fixed price offering*"[1].

A. Summary of Staff Proposal

The Staff reference price would set price limits for electric and gas 12-month fixed price products that Energy Service Companies ("ESCO") can offer to residential and small non-demand commercial and industrial customers ("mass market"). Staff states that "The reference price would be established for each utility operating in each load zone for each customer type," and "would be established by Staff or its consultant approximately 6-weeks prior to the beginning of each 12-month period and will be posted on the Departments Website."[2] Reference prices would be calculated each month by Staff or their consultant.

Staff states that the purpose of the reference price formula is to establish a just and reasonable per kilowatt-hour price for a 12-month fixed price supply product. The reference price must consider the "additional risks ESCOs incur when offering a fixed price product" and should be "transparent, sufficient, visible, timely provided and easy to administer"[3]. Staff warns that ESCOs offering fixed price products priced above the Staff reference price would be subject to Staff review and possible compliance action.

B. The Staff Proposal Should Be Summarily Rejected

Staff's proposal should be rejected since a reference price for the New York market is not needed, the proposal fails to meet a number of its stated goals and the proposal's pricing methodology is overtly flawed. More specifically Staff's proposal should be discarded for the following reasons:

- The New York market is already transparent so a "reference price" is not needed. Further, introducing an artificial reference price no customer can contract for but which ESCOs must compete against introduces a market distortion.

[1] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 1
[2] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 1-2
[3] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 2

- Staff's proposal fails to meet its stated goals since the reference price is not transparent or sufficient and does not account for a number of risks ESCOs face when offering a fixed price product.
- The reference price is an arbitrary price cap, not a benchmark, and does not represent either the market or the cost to serve retail customers.
- Staff's price cap will harm both consumers and ESCOs and will provide none of the consumer protections sought by Staff.
- Staff fails to explain how customer type definitions discussed in the whitepaper will be derived.
- Staff's proposal to set price caps 6 weeks before the 12-month fixed price period begins will limit key advantages of retail competition to consumers.
- Staff's pricing methodology does not account for a number of cost components associated with term retail supply, contains arbitrary figures to account for other cost components, and lacks specificity on the derivation of yet other cost components.

In summary, if the intent of the Staff proposal is to improve the market for consumers it misses the mark and should be abandoned. The remainder of this document details the flaws with the Staff proposal.

II. Pricing for Mass Market Customers is Already Transparent

There are many ESCOs operating in the State of New York who offer one year fixed price products to mass market customers and many fixed price offers are posted publically on the http://www.newyorkpowertochoose.com/ website. New York customers are free to view all offers posted and are not obligated to sign up for any. Further, customers are free to contact any ESCO directly and negotiate individual deals.

Since prices are posted publically a benchmark for the market already exists. Calculating a "reference price" based on an academic formula, as Staff proposes, that may or may not be representative of any ESCO's pricing methodology provides no value to consumers. In addition, since consumers can't actually contract for the Staff reference price but ESCOs are forced to price at or below it Staff's proposal introduces a market distortion since the market is forced to adjust to meet the Staff price. Market distortions can exert disastrous impacts on what would otherwise be a healthy market. For example, in a scenario where no ESCO can offer a 12-month fixed price at or below the Staff reference price consumers may be forced to return to their respective utility at variable rates they do not want.

III. The Reference Price Fails to Meet its Stated Goals

Staff's reference price does not account for the additional risks ESCOs incur when offering fixed price products and is not transparent or sufficient. As such, the reference price fails to meet even its stated goals.

As discussed later in this report, Staff's reference price fails to account for many cost and risk items incurred by ESCOs to provide term fixed price products to their customers. Further, the Staff whitepaper does not explain how many cost components are derived, thus making it non-transparent. Staff also does not sufficiently explain how customer profiling and load forecasting will be done.

Finally, Staff's reference price will not provide consumers with price protection since it's not a default rate anyone can sign up for. The only consequence of the Staff proposal will be to limit competition in the State of New York.

IV. The Reference Price is an Arbitrary Price Cap, not a Benchmark

Staff's claim that the reference price establishes a benchmark is erroneous since the term "benchmark" implies the reference price will provide a market signal. Instead the reference price will act as an arbitrarily derived price cap that will stifle competition and limit options for mass market customers.

A. The Reference Price Will Not Be Made Available to Actual Customers

The Commission will not be offering consumers a contract option for Staff's reference price, nor is the Commission mandating that any New York utility offer Staff's reference price to their customers. The Commission is also not mandating that any utility utilize Staff's methodology to derive any utility tariff. As such, the reference price will only constrain the pricing options and methodologies employed by ESCOs. Diversity in ESCO pricing models is a market strength since it leads to greater consumer choice. Doing away with this diversity limits choice.

B. The Reference Price Will Not Benchmark the Market

The reference price will not represent the market. The reasons for this are detailed in Section VII and Section VIII of this report. In summary, the reference price:

1. is set 6 weeks prior to delivery when the market fluctuates continuously

Setting a price 6 weeks prior to the delivery period that is based on a 3-day average of posted prices in one exchange does not represent the market or cost to serve. Further, since the market continues to move after the price is set the reference price will continue to lose relevance over time.

2. uses arbitrary figures to set the prices of market based components

Staff's methodology uses arbitrary percentage and dollar figures to set the price of certain market based components.

3. lacks information regarding the derivation of market based component costs

Staff's methodology lacks specifics on how a number of price components will be derived.

C. The Reference Price Will Not Proxy the Cost to Service Retail Customers

In addition to misrepresenting the market, the reference price will also render a false proxy of the cost to serve retail customers. The reasons for this are detailed in Section VI, as well as Section VII and Section VIII of this report. In summary, the reference price:

1. understates the costs to serve retail customers

There are a number of costs and risks incurred by ESCOs when offering 12-month fixed price products that are missing from Staff's reference price methodology. As such, the reference price understates the cost to serve retail customers.

2. uses arbitrary figures to set costs associated with retail supply

Staff's methodology employs a number of arbitrary percentage and dollar figures to set the price of certain components.

3. does not explain how customer type definitions will be derived

Staff's whitepaper does not explain how customer definitions utilized in calculating each reference price will be derived.

4. lacks detail on the derivation of certain cost components

Staff's methodology lacks specifics as to how a number of non-market based price components will be derived.

D. The Reference Price is an Arbitrary Price Cap

Because of its stated "*not to exceed*" imposition the reference price is a price cap imposed on ESCOs. Since this price cap does not represent the market or the cost to serve retail customers it is also arbitrary. As such, the reference price will limit choice while not offering any insight as to the state of the market.

V. The Reference Price Will Harm both Consumers and ESCOs

The imposition of an arbitrary price cap on ESCOs will harm both consumers and ESCOs by limiting market activity and reducing the options available to consumers.

A. The Reference Price Will Harm Consumers

Since New York utilities only offer monthly variable rates to mass market customers the only options these customers have to lock in for longer periods is to contract with ESCOs. By imposing price caps that do not represent the market or an ESCO's cost to serve Staff will limit consumer choice, and may force New York customers to accept monthly variable rates from their associated utilities they do not want.

Further, as is discussed in Section VII, the reference price will limit the ability of New York customers to lock in prices during periods of historically low market prices ("down market"). Conversely, the reference price may trap consumers in a high priced market.

B. The Reference Price Will Harm ESCOs

The reference price will harm ESCOs in two ways; first it will limit the ability of ESCOs to offer fixed price options to their customers and second it will introduce regulatory burdens and risks that did not exist previously since ESCOs may now be held liable if their price offerings do not meet Staff's arbitrary standards. This will harm the retail market even further.

VI. Customer Load Derivation is Undefined

Forecasting retail customer load is a key component when generating a 12-month fixed price offer since the customer's actual usage will not be known prior to contracting. The way that customer load is defined, profiled and forecasted can have a significant impact on the resulting price. Staff claims that a "*reference price would be established for each utility operating in each load zone for each customer type (i.e. residential, small non-demand metered C&I).*"[4] However, Staff does not explain how these customer types will ultimately be defined and forecasted. As such, the reference price may ultimately rely upon definitions that vary from those used by ESCOs.

A. New York Utilities Define Customers Differently

New York utilities don't define their residential and small commercial customers in the same manner. Consolidated Edison ("ConEd"), for example, has seventeen (17) profile definitions for residential customers while New York State Electric & Gas ("NYSEG") has only three (3)[5]. Staff does not make clear if separate reference prices will be generated for every relevant

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[4] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 2-3
[5] See Exhibit 1.1

definition of each utility or if the definitions will be more generic. Further Staff does not specifically stipulate that utility load profile definitions will even be used.

B. ESCO Load Forecasting Methods Differ

While New York utilities provide general guidance on customer profiling it is left to ESCOs to forecast customer usage to generate pricing scenarios. The profiling and forecasting methods employed by ESCOs will vary depending on internal capabilities, available data and propensity for risk. ConEd, for example, provides a weather response function ("WRF") for each customer class along with a daily weather variable used to derive each customer class profile[6]. To generate the load forecast model input for a mass market fixed price offer an ESCO might run forecasted and/or normalized weather through the ConEd WRF, employ a calendar mapping technique to forecast historical profiles or utilize some other method.

NYSEG provides a static day type profile for each customer type based on 1997-2002 data[7]. As a result, ESCOs will employ different techniques to generate load forecasts for NYSEG customers then they will for ConEd customers.

Staff makes no mention of any technique they plan to use for any utility to derive forecasted load. The Staff whitepaper simply fails to address this issue.

VII. 6-Week Price Caps Limit Choice and Create Enrollment Risk

Staff's proposition that reference prices be established approximately 6-weeks prior to the beginning of each 12-month fixed price period in effect creates a 6-week price cap that ESCOs must compete against. There are a number of issues that arise because of this.

A. Limit ESCO Pricing Offers

Setting a price cap 6 weeks prior to the start of the service period means that ESCOs risk reneging on contracts signed by customers before the 6-week price cap window since the reference price will not yet be known. As a result, ESCOs will cease to provide 12-month fixed price offers to mass market customers before the reference price period commences. This will limit retail pricing options to New York consumers throughout the year.

B. Stifle Consumer Ability to Take Advantage of a "Down" Market

The 6-week price cap will limit the ability of customers to take advantage of historically low market prices since fixed price offers will no longer be available prior to the 6-week reference price period. Take for example a small commercial customer whose current contract expires in 90 days but wants to sign a renewal contract today to take advantage of historically low

[6] See Exhibit 1.2
[7] See Exhibit 1.2

prices. Under the Staff proposal this customer will have to wait approximately a month and a half before he could sign a new contract and the market might have moved against him by then.

Further, if market prices spike when the 6-week reference price period begins this customer may be trapped between accepting a high 12-month fixed price offer or a high variable rate from his local utility. In either case the customer is made worse off because of the reference price.

C. Customer Enrollment & Switching Issues

The time it takes from ESCO enrollment submittal to actual flow will vary on a case by case basis for all New York utilities. In addition, some New York utilities switch customers on their associated meter read dates while others switch them on the first of the month. Since the Staff reference price is only generated for a calendar 12-month period (meaning the 1st of the month through last of the month) a number of issues will result.

1. Enrollment and switching schedules do not align with the 6-week price cap

Customer switching across New York utilities can take anywhere from 5 days to 60 days[8]. Since a Staff reference price only remains valid for approximately 42 days (or 6-weeks) ESCOs bear the risk that a signed customer won't start flow until after the reference price expires.

Let's take an example where the reference price is determined for the period of 7/1/2016 through 6/30/2017 and an ESCO submits an enrollment with expected flow beginning 7/1/2016. If processing takes longer than expected and the switch date moves to 8/1/2016 the customer's service period would now run from 8/1/2016 to 7/31/2017. Since a different reference price will be valid for this period the ESCO may be forced to either renege on an already signed contract or risk being out of compliance and open to reprimand by the Commission.

2. Issues with meter read date based switching

Some New York utilities switch customers on their associated meter read date as opposed to the start of the month. The Staff price cap always assumes a 1st of the month start and a last day of the month end. Taking the 7/1/2016 to 6/30/2017 example, if the ESCO contract extends from 7/1/2016 through 6/30/2017, but the actual service period due to the customer's meter read date extends from 7/17/2016 through 7/16/2017 the ESCO may be out of compliance and open to reprimand by the Commission.

No accounting for load ramping

[8] See Exhibit 1.3

ESCOs account for meter read date based switching by partially pricing the first and last month of a 12-month fixed price contract. This concept of “load ramping” sets the partial hedge requirements of the first and last month of each contract. This is critical since there may be additional costs incurred for intra-month hedging. In the example above the “ramp on” period would run from 7/17/2016 through 7/31/2016 and the “ramp off” period would run from 7/1/2017 through 7/16/2017. How ESCOs account for the cost associated with load ramping in their mass market pricing will vary based on their buying options and propensity for risk.

The Staff reference price methodology ignores ramping completely. Further, since the reference price is generated for a simple 12-month calendar it does not provide any price signal for the ramp off period occurring on the 13th month or the month after the reference price period ends.

VIII. The Reference Price Methodology Contains Numerous Flaws

The Staff proposal is essentially an academic exercise that provides an unqualified proxy of the cost to serve a retail customer who signs a contract exactly 6 weeks before his delivery date in the case of power and an equation that can’t be solved for in the case of gas. The issues with Staff’s pricing methodologies are numerous, but fall into three basic categories:

1) Staff’s pricing proposal underestimates the cost to serve a retail customer by failing to account for a number of risk factors associated with retail term supply
2) Staff’s proposal leaves out many details regarding how certain price components will be derived and updated
3) Staff’s proposal contains a number of arbitrary figures with no tie to actual costs

A. Issues with Electricity Price Methodology

Staff proposes the following equation to set electricity reference prices:

- **REFERENCE PRICE : $R_{L,U,M} = E_{L,U,M} * F + C_{L,U,M} + P$**
  - *$R_{L,U,M}$ = reference price for NYISO load zone L for utility U for the 12-month period beginning in month M*
  - *$E_{L,U,M}$ = ICE LMP reference price as computed below*
  - *F = Multiplier to cover costs of load shaping, ancillary services etc., as shown below*
  - *$C_{L,U,M}$ = ICE ICAP capacity value as computed below*

- *P = Risk premium to cover ESCO customer acquisition, financing, labor, POR costs, taxes*[9]

1. Base Energy Price

To set the energy portion of the reference price, or what Staff terms the "Base Energy Price", Staff proposes the following:

- *Use 3 days' average of 12 monthly Zone A (ICE: NAY), G (ICE: NGY) & J (ICE: NJY) on peak ATC energy futures (12 future prices per zone) – straight average to develop annual on peak strip price. Updated monthly.*
- *3 days' average of 12 monthly zone A (ICE: AOP), G (ICE: NGO) & J (ICE: NJO) off peak ATC energy futures (12 future prices per zone) – straight average to develop annual off peak strip price. Updated monthly.*[10]

This academic approach is simply not representative of how actual ESCOs derive price offers for prospective customers.

<u>ESCOs do not generate offer prices based on a 3-day average</u>

The most accurate benchmark of the market when using futures prices is the latest posting of those prices. By using a 3-day average Staff introduces an unnecessary market distortion since what the futures market did 3 days ago has no relevance on what it's doing today. ESCO's understand this and base their executable pricing on today's market signals and not signals from 3 days ago.

While ESCOs do hold open prices on New York's Power to Choose website they continually survey the market and adjust their prices when necessary. The bottom line is that their decision making is driven by today's market not yesterday's.

<u>It's faulty to assume that all ESCOs always or ever rely on ICE</u>

ESCOs procure power to serve customers via exchanges, brokers, bilateral trades, self-generation and utilizing NYISO's day-ahead and real time markets. Many ESCOs will take advantage of multiple procurement options to manage their load. Price signals between these options will vary and the ESCOs will use these price signals to determine their hedging strategies. There is nothing that stipulates that price postings on ICE will represent the true cost to procure electricity for any ESCO. As such, mandating a price cap based on posted ICE futures, much less setting these price caps 6 weeks before the point of delivery, is completely arbitrary and says nothing about the state of the retail market.

<u>Standard ICE contracts trade in 800 MWh blocks</u>

[9] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 3
[10] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 3

ICE contracts trade in 800 MWh blocks[11]. It would take many residential and small commercial customers to fill such a block. ESCOs with established books may utilize standard ICE contracts to hedge base load but managing the load of new mass market customers requires more sophisticated hedging techniques.

Staff's proposal contains nothing to account for the costs associated with procuring energy for incremental load of small customers as it comes on line. This again demonstrates a disconnection between the academic retail pricing approach proposed by Staff and the real world of retail energy that ESCOs contend with.

<u>Base energy price does not account for the costs of energy price shaping</u>

The Staff whitepaper references load shaping but does not address price shaping. While customer load may be hedged using wholesale on and off peak blocks, the load and hedge ultimately settle at NYISO real time and day ahead markets, where prices vary hour by hour. The associated cost of this shaping is incorporated into ESCO offer prices in two ways:

1) The ESCO derives a cost estimate to shape a wholesale on/off peak block to the expected NYISO LBMP settlement
2) The ESCO derives the cost associated with the risk that the expected cost of price shaping will deviate from actual

Staff's proposal contains nothing to account for these costs and so understates the base energy price as a result.

<u>Base energy price does not account for the risk of market movement</u>

The base energy price is set 6 weeks prior to the start of the 12-month fixed price period, but does not account for the risk of market movement after the price is set. This is critical since ESCO's can continue to sign up customers within the 6-week period. To act as a true benchmark the Staff reference price must take the risk of this market movement into account.

Intelometry reviewed the movement of a 12-month strip of on and off peak futures prices posted on the New York Mercantile Exchange ("NYMEX") for New York Zone J ("Zone J") taken at each posting day beginning 6 weeks prior to the first day of the 12-month strip[12]. To illustrate how extreme price movements can be over a 6-week period we looked at the price movement for a Feb/14 to Jan/15 strip taken at each posting day 6 weeks prior to February 1st, 2014, the beginning of the now infamous "Polar Vortex". Results show that the posted prices for Feb/14 rose as much as 188% from the start of the 6-week period. Additionally, results show that the average peak price for the Feb/14 to Jan/15 strip rose

[11] https://www.theice.com/products

[12] See Exhibit 1.5

by as much as 42% from the start of the 6-week period and the average off peak price rose by as much as 32%.

By failing to account for the risk of market movement Staff's base energy price fails to act as a benchmark for the market or a reference for the expected cost to serve.

2. Price Derivation into Non-Liquid Zones

To derive the cost of energy into less liquid New York zones Staff proposes the following:

❖ *Use historical NYISO data to adjust the forward prices for zones A, G & J to calculate prices for all non-liquid NYISO Zones. Basis differentials updated annually.*[13]

This approach lacks key information that would enable a full critique. From what is available, however, it can be surmised that Staff's approach is yet another academic exercise that does not represent how ESCOs value basis.

Staff's derivation to on-liquid zones lacks clarity

Staff's proposal does not explain precisely what is meant by "historical NYISO data" or how such data will be used to calculate an energy price to non-liquid zones. Is Staff planning to use real-time locational based marginal pricing ("LBMP"), day-ahead LBMP, Transmission Congestion Contracts ("TCC"), all of the above or some other data set? None of this is clarified.

Further, Staff does not explain the size of the historical data set that will be used or what equations will be applied. These items are critical to know since retail energy experts will disagree on methods to price less liquid zones and varying methods can yield completely different valuations of cost.

Staff's approach does not represent how ESCOs price non-liquid zones

ESCOs price less liquid zones using varying techniques that are based on their buying options, generation assets, existing load base, propensity for risk and analytical capability. There is nothing to suggest that the unspecified equation proposed by Staff is a better "benchmark" for actual cost than any technique employed by any ESCO.

For example, just because a zone is considered "non-liquid" by Staff does not mean that all ESCOs lack viable options to buy directly in that zone. NYMEX regularly reports futures prices into NYISO Zones C, E & F[14]. All of these zones are considered "non-liquid" in the Staff whitepaper. It can easily be argued that the differential in posted futures between NYISO Zone G and NYISO Zone F is a better basis benchmark for a forward one year strip than the historical LBMP cost differential between the two zones.

[13] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 4
[14] ftp://ftp.cmegroup.com/pub/settle/stlcpc

Further, ESCOs do not necessarily hold basis between liquid and non-liquid zones constant for an entire year the way Staff proposes to do. The differences in costs between NYISO zones fluctuates continually. The Staff proposal recalculates the energy price in liquid zones monthly, but only calculates the non-liquid zone adjustment annually; why?

3. Energy Multipliers

Staff proposes two adders that will be multipliers of the zonal energy price including:

- *Energy load following adjustment (load varies based on load shape, weather, etc) – 10% of base energy price. Updated based on need.*
- *Tariffed energy losses, unaccounted for energy, and ancillary services (including uplift) – 20% of base energy price. Updated based on need.*[15]

In both cases Staff fails to explain where the percentages come from.

Energy load following adjustment

Staff sets a premium for load shaping at a flat 10% across the entire year strip for all customer types. There is no indication in the Staff whitepaper as to how this 10% premium was derived and why the premium stays constant for all months, customer types and utilities.

Variations in customer load do not stay static month to month. Intelometry regularly maintains load profiles for all New York utilities. Looking at simple graphs of historical data for two ConEd small commercial load profiles, ***SC 02 - C&I SMALL GENERAL SERVICE with strata A*** ("SC2-A") and ***SC 02 - C&I SMALL GENERAL SERVICE with strata B*** ("SC2-B"), it becomes clear that the degree of load fluctuations vary depending on the time of year and that the two customer types exhibit different load patterns despite being of a similar size and residing in the same utility[16]. Staff, however, proposes to maintain the shaping premium for both customer types at a flat 10% for the entire year regardless of their load variations and further applies the same premium to all customer types across all utilities. This is a significant oversight. Customer SC2-A, for example, peaks in both summer and winter, while customer SC2-B peaks only in summer. ESCOs would value the shaping risk associated with each of these customers differently based on their expected load shape.. Staff, on the other hand, considers both customers equal in all months.

Staff also does not explain what is meant by the adjustment will be "Updated based on need". What exactly will be updated based on what need? How will this need be determined? If a faulty reference price drives ESCOs out of the market updating it after the fact will be too late.

[15] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 4
[16] See Exhibit 1.6

Losses, UFE and ancillary services adjustment

Staff sets a premium for loss factors, unaccounted for energy ("UFE") and ancillary services at a flat 20% across the entire year strip for all utilities. There is no indication in the Staff whitepaper as to how this 20% premium is derived or why the premium stays constant across all months and utilities.

Ancillary services

Many NYISO ancillary services are market based with prices settling daily. Market based ancillary services prices may or may not be correlated with energy prices. ESCOs will derive their ancillary price curves differently based on internal analyses of the expected costs and risks associated with these components.

The Staff whitepaper did not present any explanation, much less illustrations, of the costs associated with ancillary services that are embedded in their 20% adjustment figure. Staff also did not explain why they insist that ancillary services costs must be a function of the energy market. As such, Staff is simply using an arbitrary figure to set the cost of market based components.

Historical ancillary services prices are available from NYISO. Staff could have used them to derive a meaningful price but chose to embed them in an arbitrary adjustment figure instead.

Losses and UFE

New York utility loss factors are not uniform. ConEd, for example, provides dynamic hourly loss factors that vary across ConEd zones. Other New York utilities publish static loss factors, but these vary utility by utility[17]. UFE can also vary greatly from one utility to another. ESCOs value the cost of losses and UFE individually for each utility yet Staff is proposing a one size fits all approach.

Further, as with the load following adjustment, Staff does not explain what is meant by "Updated based on need". If price caps are going to be imposed on ESCOs there should be a clear understanding of their drivers.

4. Capacity

Much like their proposal for calculating the Base Energy Price, Staff's proposal for calculating capacity is academic in nature and likely understates the true cost of capacity that will be incurred by ESCOs to serve mass market customers.

Capacity Cost for Zone J and Rest of State

Staff proposes to calculate the base capacity price for Zone J and Rest of State ("ROS") in the following manner:

[17] See Exhibit 1.7

- *Use 3 days' average of sum of 12 monthly capacity futures for Zone J (ICE: NYC) to develop the annual Zone J-specific price ($/kw-yr). Updated monthly.*
- *Use 3 days' average of sum of 12 monthly capacity futures for rest of state (ICE: NYR) to develop annual ROS-specific capacity price ($/kw-yr). Updated monthly.*[18]

As with the Base Energy Charge, there is no reason to use a 3-day average of posted prices. The most accurate representation of the current market is the latest posting of market prices. Using a 3-day average simply introduces a market distortion that makes any benchmark less accurate.

Further, there is nothing to suggest that ESCOs will use ICE to either procure capacity or use posted ICE prices as an input in their own capacity pricing models. NYISO continually posts spot, monthly and strip auction capacity prices so why is ICE a better measure than NYISO's own clearing prices?

Additionally, ICE NYISO capacity contracts trade in 1,000 kW blocks[19]. It would take many residential and small commercial customers to fill such a block. Since ESCOs contend with serving fluctuating load as new meters come line on while others drop off NYISO auction prices may drive an ESCO capacity price curve more than ICE futures postings.

Finally, since a single mass market customer is too small for an ESCO to hedge their capacity immediately upon enrollment, there is a risk that the actual cost of capacity will deviate from the expected cost. The cost associated with this risk is completely absent from Staff's proposed model. As a result, even if one were to accept Staff's general approach their price of capacity would still be understated.

Capacity Cost for Lower Hudson Valley

To price capacity to the Lower Hudson Valley (G-J) Staff proposes the following:

- *Apply a basis differential calculated from the NYISO data to calculate Lower Hudson Valley (LHV: Zones G-J) specific capacity price ($/kw-yr). LHV capacity price = Zone J capacity price * 57% based on May 2015 – April 2016 NYISO data. Basis differentials updated annually.*[20]

Applying Staff's methodology to NYISO published strip auction prices for NYC (Zone J) and the G-J locality (LHV) it's clear that the difference between them does not stay constant[21]. By setting the basis percentage annually Staff can completely understate or overstate the LHV capacity price. For example, Staff would presume to set the LHV capacity price at 57% of the Zone J price based on the May 2015 to April 2016 year. However, looking at

[18] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 4
[19] https://www.theice.com/products
[20] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 4
[21] See Exhibit 1.8

the most recent published NYISO strip auction prices for summer 2016 the LVH price is 75% of the Zone J price[22]. As such, Staff's current proposal already understates the price of capacity to the LHV zone. If this was a real life scenario Staff would have set the reference price below market and ESCOs would not have been able to compete.

In addition, since NYISO continually updates posted spot, monthly and strip auction capacity prices ESCOs will continually use these figures to adjust their capacity forward curves. Because Staff holds their basis constant for an annual period the risk exists that this figure will become less representative of the market as the year progresses. The cost associated with this risk is completely absent from the Staff model. As a result, Staff's LHV capacity price would be understated even if one were to accept their general pricing approach.

<u>Capacity Price Conversion to $/kWh</u>

To convert the calculated capacity price to $/kWh Staff proposes the following:

- *Convert to $/kWh using service class load factor based on NYISO class coincident peak. Load factors updated annually.*[23]

Staff's conversion does not account for the risk that the actual load factor of the customer will deviate from actual. Since there is ultimately a cost associated with this risk Staff again understates the true cost of capacity by not including it.

5. Retail Cost Adder

Staff proposes to include what they term a "Retail Cost Adder" of $0.02/kWh[24] to account for:

- *P = Risk premium to cover ESCO customer acquisition, financing, labor, POR costs, taxes*[25]

The issue here is that the $0.02/kWh is completely arbitrary. Staff does not know the costs associated with ESCO customer acquisition, financing and labor, nor are these costs the same across ESCOs. Additionally, these costs do not stay constant so can be quite difficult to estimate. By including an arbitrary value to cover unknown costs Staff's Retail Cost Adder is not a benchmark for any retail price.

While Staff does claim that they will update the Retail Cost Adder "based on need"[26] this too is a fallacy. No ESCO will willingly report their customer acquisition, financing and labor costs as these are competitively sensitive and burdensome to calculate.

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[22] See Exhibit 1.8
[23] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 5
[24] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 5
[25] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 3

6. Margin and Broker Fees

The Staff proposal makes no mention of ESCO margin or broker fees. This is a significant oversight. ESCOs cannot stay in business if they are not allowed to make a profit. Further, since brokers are generally paid by the ESCO the absence of broker fees may drive brokers out of the market.

B. Issues with Gas Price Methodology

Staff proposes the following equation to set gas reference prices:

- **REFERENCE PRICE: RU,M = DU + (C + BU)*FU*WU + P + M + Y.**
  - *RU,M = reference price at Local Distribution Company (LDC) U's franchise area for the 12-month period beginning in month M.*
  - *DU = Weighted average Cost of pipeline capacity for LDC U, including fuel/line loss factor.*
  - *C = NYMEX or ICE Futures commodity price.*
  - *BU = Basis forecast from CME Group.*
  - *FU = LDC U.*
  - *WU = Weather Risk at LDC U's franchise area.*
  - *Y = charges to ESCOs for balancing services and applicable managed storage services.*
  - *P = Premium includes supplier margin and MFC related costs, including purchase of receivables and billing.*
  - M = Cushion to limit price gouging.[27]

1. Commodity Price & Basis Forecast

Staff proposes to use a NYMEX or ICE futures to set the commodity price and combine it with a basis forecast from CME Group to set the annual price. Staff also maintains that the commodity plus basis forecast price will be load weighted.

<u>Commodity price and basis forecast price do not account for the risk of market movement</u>

The commodity price and basis forecast are set 6 weeks prior to the start of the 12-month fixed price period, but do not account for the risk of market movement after these prices are set. This is critical since ESCO's can continue to sign up customers within the 6-week period. To act as a true benchmark the reference price must take the risk of this market movement into account.

Intelometry reviewed the movement of a 12-month strip (Feb/14 to Jan/15) of NYMEX Henry Hub futures prices taken at each posting day beginning 6 weeks prior to the first

[26] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 3
[27] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 6

day of the 12-month strip[28]. Results show that the posted prices for Feb/14 rose by as much as 29% from the start of the 6-week period and the average 12-month strip price rose by as much as 11%.

<u>Application of Load Weighting is unexplained</u>

The Staff proposal states that:

- *The commodity price and the basis forecast are load weighted to reflect higher consumption and higher costs in the winter.*[29]

No explanation is given as to how this load weighting will take place and precisely which load(s) will be used.

2. Factor P

The Staff proposal applies a "Factor P" to account for supplier margin and MFC related costs, including purchase of receivables and billing. Aside from the lack of transparency, Factor P would essentially dictate the margin ESCOs would be allowed to collect. This would make the ESCO no different than a regulated utility with a regulated rate of return.

Further, Staff states that "*Factor P will be decided periodically by the PSC, based on need.*"[30] No additional information is given as to what this statement actually means. How will the Commission determine need? Will there be regular market surveys of ESCOs, customers, other? What will be the mechanism for this update?

3. M: Cushion to limit price gouging

The Staff proposal provides for a value called "M" that is meant to limit "price gouging". No explanation is provided as to what is meant by price gouging, how such price gouging will be determined or whether "M" will be a dollar adder or a factor applied to the overall price.

4. Weather Risk Premium

The Staff proposal includes a weather risk premium factor ("WU") to be calculated in the following manner:

- *Weather Risk Premium Factor varies by area. Weather Risk factor ranges from 1.05 to 1.10 (or 5-10% of the commodity cost).*[31]

[28] See Exhibit 1.5
[29] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 7
[30] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 7
[31] STAFF WHITEPAPER ON BENCHMARK REFERENCE PRICES page 7

No explanation is provided as to how WU will be derived for each area or why Staff determined that it should always be 5% to 10% of the gas commodity cost. Staff also does not explain if "area" refers to an LDC service area, municipality, or some other measure.

IX. Conclusion

The Staff reference price proposal should be summarily rejected. Staff's reference price methodology will hinder the New York retail energy market while providing no benefits to consumers. The reference price is also based on a flawed methodology and fails to fulfil even its stated goals.

The New York retail energy market is already transparent with many ESCOs publically posting fixed price offers to mass market customers. Further, the Commission already monitors ESCO activity and provides an ongoing platform for consumers, utilities and ESCOs to address retail energy market issues. As such, a benchmark for the market is not needed.

Appendix

Exhibit 1.1: Residential Customer Definitions

Consolidated Edison

1. SC 01 – RESIDENTIAL
2. SC 01 – RESIDENTIAL with strata A
3. SC 01 – RESIDENTIAL with strata B
4. SC 01 – RESIDENTIAL with strata C
5. SC 01 – RESIDENTIAL with strata D
6. SC 01 – RESIDENTIAL with strata E
7. SC 01 – RESIDENTIAL with strata F
8. SC 07 – RESIDENTIAL SPACE HEATING
9. SC 07 – RESIDENTIAL SPACE HEATING with strata A
10. SC 07 – RESIDENTIAL SPACE HEATING with strata B
11. SC 07 – RESIDENTIAL SPACE HEATING with strata C
12. SC 07 – RESIDENTIAL SPACE HEATING with strata D
13. SC 07 – RESIDENTIAL SPACE HEATING with strata E
14. SC 07 – RESIDENTIAL SPACE HEATING with strata F
15. SC 01 – RELIGIOUS
16. SC 01 – RELIGIOUS with strata A
17. SC 01 – RELIGIOUS with strata B

Source: *ConEd's Retail Access Information System (RAIS)*
https://apps.coned.com/retailaccess/ra_start.asp?passUID=0&passUCD=V

New York Electric & Gas

1. Segment 032 – Service Class 1 – Residential Service
2. Segment 046 – Service Class 8 – Residential - Day Night Service
3. Segment 048 – Service Class 12 – Residential Service with Time-of-Use Metering

Source: *NYSEG Website*
http://www.nyseg.com/SuppliersAndPartners/electricityescos/loadprofiles.html

Exhibit 1.2: ConEd Load Profile WRF Sample

SC1 Residential WRF

Description	SC	STRATA	STRATAVAR	STRATLBOUND	STRATUBOUND	DAYTYPE	TEMPLBOUND	TEMPUBOUND	KW1	KW2	KW3	KW4	KW5	KW6	KW7	KW
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	FRI	-50	28	0.4	0.35	0.32	0.29	0.28	0.29	0.32	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	FRI	28.01	54	0.4	0.35	0.33	0.3	0.29	0.31	0.34	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	FRI	54.01	62	0.4	0.33	0.3	0.28	0.3	0.32	0.33	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	FRI	62.01	67	0.49	0.38	0.36	0.33	0.33	0.34	0.37	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	FRI	67.01	72	0.61	0.53	0.46	0.44	0.41	0.42	0.45	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	FRI	72.01	75	0.78	0.72	0.65	0.59	0.56	0.56	0.58	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	FRI	75.01	150	0.96	0.87	0.81	0.75	0.7	0.72	0.73	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	HOL	-50	28	0.4	0.35	0.32	0.29	0.28	0.29	0.32	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	HOL	28.01	54	0.4	0.35	0.33	0.3	0.29	0.31	0.34	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	HOL	54.01	62	0.4	0.33	0.3	0.28	0.3	0.32	0.33	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	HOL	62.01	67	0.49	0.38	0.36	0.33	0.33	0.34	0.37	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	HOL	67.01	72	0.61	0.53	0.46	0.44	0.41	0.42	0.45	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	HOL	72.01	75	0.78	0.72	0.65	0.59	0.56	0.56	0.58	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	HOL	75.01	150	0.96	0.87	0.81	0.75	0.7	0.72	0.73	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	MON	-50	28	0.4	0.35	0.32	0.29	0.28	0.29	0.32	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	MON	28.01	54	0.4	0.35	0.33	0.3	0.29	0.31	0.34	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	MON	54.01	62	0.4	0.33	0.3	0.28	0.3	0.32	0.33	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	MON	62.01	67	0.49	0.38	0.36	0.33	0.33	0.34	0.37	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	MON	67.01	72	0.61	0.53	0.46	0.44	0.41	0.42	0.45	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	MON	72.01	75	0.78	0.72	0.65	0.59	0.56	0.56	0.58	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	MON	75.01	150	0.96	0.87	0.81	0.75	0.7	0.72	0.73	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	SAT	-50	28	0.4	0.35	0.32	0.29	0.28	0.29	0.32	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	SAT	28.01	54	0.4	0.35	0.33	0.3	0.29	0.31	0.34	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	SAT	54.01	62	0.4	0.33	0.3	0.28	0.3	0.32	0.33	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	SAT	62.01	67	0.49	0.38	0.36	0.33	0.33	0.34	0.37	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	SAT	67.01	72	0.61	0.53	0.46	0.44	0.41	0.42	0.45	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	SAT	72.01	75	0.78	0.72	0.65	0.59	0.56	0.56	0.58	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	SAT	75.01	150	0.96	0.87	0.81	0.75	0.7	0.72	0.73	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	SUN	-50	28	0.4	0.35	0.32	0.29	0.28	0.29	0.32	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	SUN	28.01	54	0.4	0.35	0.33	0.3	0.29	0.31	0.34	
SC 01 - RESIDENTIAL	1		ANN KWH	0	999999999	SUN	54.01	62	0.4	0.33	0.3	0.28	0.3	0.32	0.33	

Source: *ConEd's Retail Access Information System (RAIS)*
https://apps.coned.com/retailaccess/ra_start.asp?passUID=0&passUCD=V

Exhibit 1.3: NYSEG Load Profile Static Day Type Sample

Segment 032 – Service Class 1

Day Type Profile									
Segment 032									
Service Class 1									
Rate No. 115-01-00, 115-01-05									
		1	2	3	4	5	6	7	8
Season:January	DayType:Weekday	0.55681	0.51669	0.48941	0.50012	0.53426	0.58316	0.77117	0.80
Season:January	DayType:Saturday	0.58574	0.56498	0.51924	0.50756	0.53788	0.55438	0.63618	0.69
Season:January	DayType:Sunday	0.59437	0.57197	0.54288	0.49945	0.51593	0.55598	0.52458	0.64
Season:February	DayType:Weekday	0.52953	0.49520	0.48488	0.47495	0.50995	0.54962	0.75892	0.73
Season:February	DayType:Saturday	0.59825	0.51900	0.49715	0.51280	0.52970	0.54655	0.57483	0.65
Season:February	DayType:Sunday	0.57880	0.52250	0.49483	0.48467	0.50490	0.54303	0.55843	0.67
Season:March	DayType:Weekday	0.50979	0.48216	0.46817	0.45523	0.49518	0.52610	0.72024	0.75
Season:March	DayType:Saturday	0.55295	0.51267	0.49440	0.48162	0.50220	0.53038	0.58615	0.59
Season:March	DayType:Sunday	0.56173	0.51945	0.48927	0.47822	0.51225	0.53618	0.58492	0.66
Season:April	DayType:Weekday	0.45933	0.42405	0.41586	0.40364	0.43827	0.47511	0.62443	0.71
Season:April	DayType:Saturday	0.52263	0.45663	0.42295	0.43740	0.47485	0.51450	0.49152	0.57
Season:April	DayType:Sunday	0.54820	0.48490	0.45460	0.47007	0.47450	0.51417	0.57443	0.67
Season:May	DayType:Weekday	0.45890	0.41203	0.38740	0.37818	0.39891	0.43937	0.61645	0.63
Season:May	DayType:Saturday	0.49382	0.44746	0.39858	0.38710	0.41328	0.42868	0.48956	0.64
Season:May	DayType:Sunday	0.51840	0.45468	0.41948	0.39847	0.40773	0.43568	0.47747	0.57
Season:June	DayType:Weekday	0.58053	0.53802	0.49259	0.48065	0.46803	0.51485	0.60798	0.62
Season:June	DayType:Saturday	0.60777	0.49907	0.46310	0.44170	0.42753	0.45247	0.54658	0.63
Season:June	DayType:Sunday	0.61115	0.57015	0.49195	0.47730	0.44497	0.46622	0.53745	0.64
Season:July	DayType:Weekday	0.70488	0.63445	0.60715	0.55402	0.56830	0.58380	0.67535	0.74
Season:July	DayType:Saturday	0.83376	0.73736	0.67070	0.65756	0.63134	0.61118	0.69840	0.80
Season:July	DayType:Sunday	0.85082	0.74692	0.68438	0.65688	0.64362	0.67096	0.72748	0.81
Season:August	DayType:Weekday	0.58048	0.53210	0.48576	0.47230	0.45896	0.50224	0.61249	0.63
Season:August	DayType:Saturday	0.65408	0.57485	0.55762	0.51190	0.49158	0.52548	0.53223	0.61
Season:August	DayType:Sunday	0.65344	0.60240	0.58020	0.53036	0.51672	0.55192	0.55920	0.70
Season:September	DayType:Weekday	0.52640	0.47132	0.43792	0.42599	0.45416	0.50101	0.70392	0.72
Season:September	DayType:Saturday	0.54595	0.48295	0.47235	0.43497	0.42050	0.44660	0.50653	0.60
Season:September	DayType:Sunday	0.58592	0.52524	0.48592	0.47068	0.46102	0.50650	0.54820	0.64
Season:October	DayType:Weekday	0.49376	0.44628	0.43408	0.42576	0.46499	0.51936	0.72625	0.79
Season:October	DayType:Saturday	0.49762	0.44920	0.42950	0.40660	0.42048	0.46860	0.55834	0.64
Season:October	DayType:Sunday	0.51860	0.47344	0.43056	0.40122	0.41460	0.44838	0.49574	0.63
Season:November	DayType:Weekday	0.46899	0.43340	0.40775	0.41879	0.45611	0.51834	0.79122	0.67
Season:November	DayType:Saturday	0.48865	0.42545	0.40262	0.39090	0.41787	0.44737	0.53315	0.62
Season:November	DayType:Sunday	0.51640	0.46684	0.43486	0.42434	0.44836	0.48264	0.58524	0.62

Source: *NYSEG Website*
http://www.nyseg.com/SuppliersAndPartners/electricityescos/loadprofiles.html

Exhibit 1.4: New York Switching

New York Mass Market Switching FAQs

FAQS

When will this plan start?

After selecting your plan and accepted by your selected supplier after completing the enrollment form, your new plan will typically begin on the next applicable meter read date after your utility processes your enrollment and continue for the number of billing cycles (months) listed in the plan contract. The account migration process can take 30 - 60 days depending on your utility's and selected supplier's enrollment process and meter read date schedule.

Source: *Choose Energy website*
https://www.chooseenergy.com/new-york/?gclid=CPShw_706MwCFYkvqQodoJYFGA

New York Switching Rules

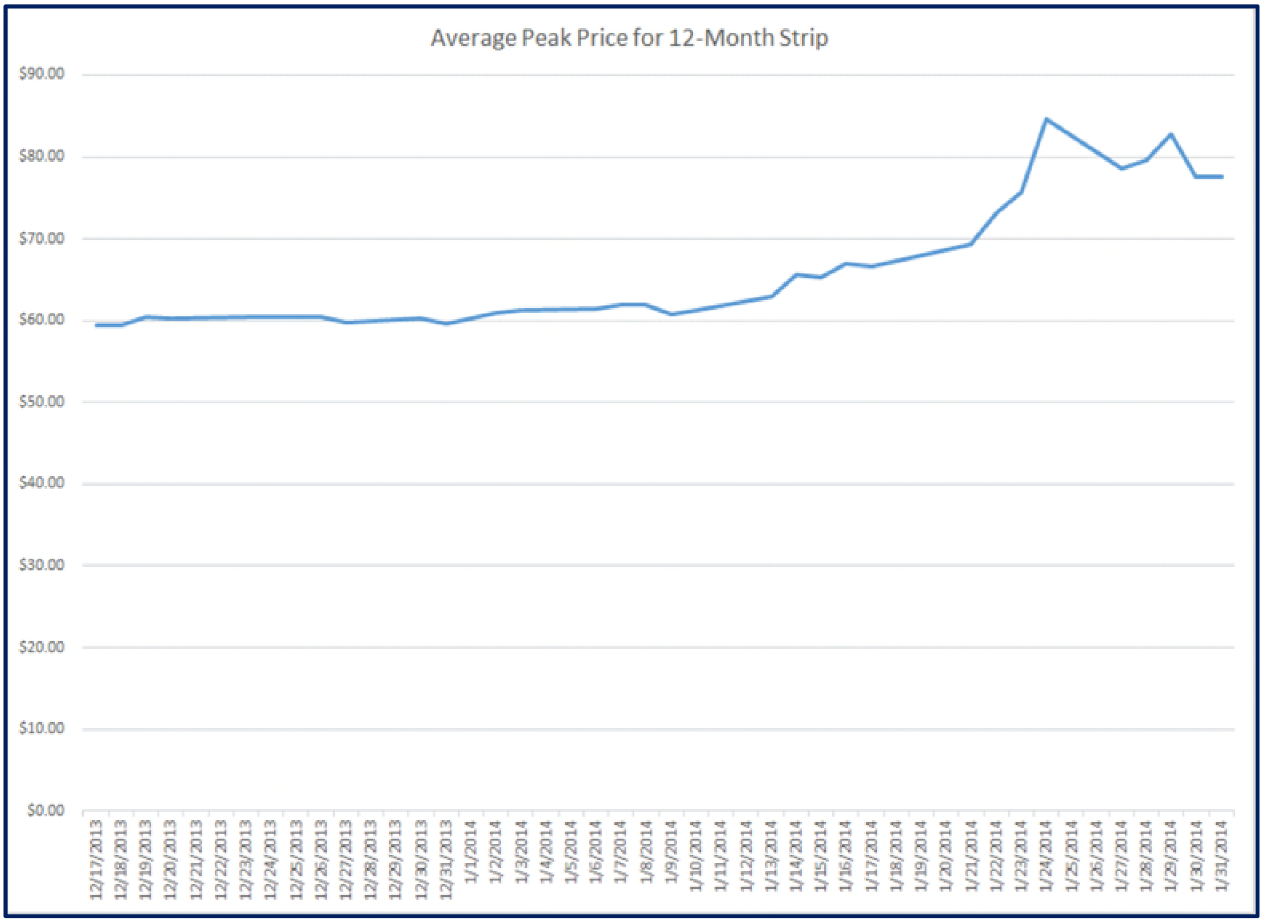
7. With the exception of a new installation use of an interim estimate of consumption or a special meter reading,[1] a change of providers is effective: for an electric customer, on the next regularly scheduled meter reading date; and, for a gas customer, on the next regularly scheduled meter reading date or the first day of the month, in accordance with provisions set forth in the distribution utility's tariff.[2] The distribution utility shall set the effective date, which shall be no sooner than 5 business days after receipt of an enrollment request. Service to new delivery customers is effective after the installation is complete and, if necessary, inspected.

Source: *STATE OF NEW YORK PUBLIC SERVICE COMMISSION, UNIFORM BUSINESS PRACTICES CASE 98-M-1343; page 29*

Exhibit 1.5: Energy Futures Price Movement

NYMEX NY Zone J Peak Futures (in $/MWh)

Strip Date	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Average
12/17/2013	$90.80	$55.28	$46.18	$47.80	$54.28	$67.10	$67.10	$47.90	$44.10	$49.40	$65.50	$78.25	$59.47
12/18/2013	$90.40	$55.35	$46.23	$47.78	$54.33	$66.95	$66.95	$47.33	$44.25	$49.50	$65.50	$78.00	$59.38
12/19/2013	$96.58	$56.23	$46.85	$47.80	$55.10	$67.70	$67.70	$47.90	$44.60	$49.85	$65.85	$80.10	$60.52
12/20/2013	$96.40	$56.18	$46.55	$47.80	$54.75	$67.25	$67.25	$47.55	$44.35	$49.65	$65.60	$80.40	$60.31
12/21/2013													
12/22/2013													
12/23/2013	$97.45	$56.80	$46.65	$47.80	$54.85	$67.30	$67.30	$47.60	$44.25	$49.30	$65.55	$80.95	$60.48
12/24/2013	$97.45	$56.80	$46.65	$47.80	$54.85	$67.30	$67.30	$47.60	$44.25	$49.30	$65.55	$80.95	$60.48
12/25/2013													
12/26/2013	$97.20	$56.55	$46.53	$47.68	$54.85	$67.30	$67.30	$47.60	$44.25	$49.30	$65.55	$80.95	$60.42
12/27/2013	$92.25	$56.10	$46.18	$47.95	$54.85	$67.10	$67.10	$47.40	$44.00	$49.55	$65.65	$79.90	$59.84
12/28/2013													
12/29/2013													
12/30/2013	$93.38	$56.40	$46.50	$48.40	$55.30	$67.30	$67.30	$48.03	$44.20	$49.75	$65.90	$79.95	$60.20
12/31/2013	$92.50	$55.80	$46.23	$47.95	$54.80	$66.65	$66.65	$47.45	$43.80	$49.05	$64.95	$79.60	$59.62
1/1/2014													
1/2/2014	$95.40	$56.73	$46.85	$48.70	$55.40	$69.57	$65.56	$48.10	$44.30	$49.80	$65.70	$85.40	$60.96
1/3/2014	$98.10	$57.00	$47.03	$48.83	$55.43	$67.30	$67.30	$48.23	$44.65	$49.95	$65.95	$85.75	$61.29
1/4/2014													
1/5/2014													
1/6/2014	$98.12	$57.55	$47.05	$48.80	$55.63	$67.35	$67.35	$48.23	$44.70	$49.90	$66.20	$87.60	$61.54
1/7/2014	$101.00	$59.00	$46.75	$49.08	$55.80	$67.15	$67.15	$48.08	$44.60	$49.85	$66.95	$88.60	$62.00
1/8/2014	$101.22	$59.08	$47.20	$48.88	$56.18	$67.55	$67.55	$48.00	$44.15	$49.30	$67.15	$87.60	$61.99
1/9/2014	$93.88	$57.88	$46.25	$48.20	$55.65	$67.05	$67.05	$47.53	$44.10	$48.85	$66.50	$85.80	$60.73
1/10/2014	$94.75	$58.48	$47.45	$48.50	$56.35	$67.75	$67.75	$48.00	$44.35	$49.35	$66.85	$85.75	$61.28
1/11/2014													
1/12/2014													
1/13/2014	$100.63	$60.77	$48.45	$49.73	$58.35	$69.24	$69.24	$48.93	$44.75	$49.70	$68.45	$88.25	$63.04
1/14/2014	$113.95	$62.53	$49.58	$51.23	$59.55	$71.75	$71.75	$49.83	$46.05	$51.05	$70.10	$90.50	$65.66
1/15/2014	$111.42	$63.42	$49.58	$51.13	$59.48	$71.25	$71.25	$49.50	$46.00	$51.00	$69.75	$90.95	$65.39
1/16/2014	$121.15	$63.90	$50.75	$52.13	$60.55	$72.20	$72.20	$49.98	$46.75	$52.00	$69.70	$92.00	$66.94
1/17/2014	$117.68	$64.42	$50.80	$52.20	$60.95	$72.60	$72.60	$49.70	$46.65	$51.55	$69.35	$92.00	$66.71
1/18/2014													
1/19/2014													
1/20/2014													
1/21/2014	$135.15	$66.82	$51.88	$52.83	$61.58	$73.60	$73.60	$50.00	$46.80	$51.35	$71.40	$97.00	$69.33
1/22/2014	$168.75	$68.03	$52.88	$53.38	$62.03	$74.10	$74.10	$50.30	$47.15	$51.70	$75.00	$101.75	$73.26
1/23/2014	$185.88	$77.00	$53.00	$53.43	$61.93	$74.50	$74.50	$50.13	$47.25	$51.85	$76.25	$103.75	$75.79
1/24/2014	$261.25	$77.53	$55.75	$54.93	$63.43	$75.75	$75.75	$52.75	$48.50	$53.60	$83.60	$113.00	$84.65
1/25/2014													
1/26/2014													
1/27/2014	$202.75	$75.28	$55.50	$53.25	$61.80	$74.25	$74.25	$51.58	$48.00	$53.25	$82.35	$110.00	$78.52
1/28/2014	$207.25	$81.55	$55.70	$53.75	$61.83	$74.25	$74.25	$51.65	$48.75	$54.35	$82.00	$110.50	$79.65
1/29/2014	$225.00	$86.28	$57.75	$54.50	$65.63	$75.85	$75.85	$52.60	$50.00	$56.25	$85.00	$109.25	$82.83
1/30/2014	$176.75	$82.27	$57.75	$54.05	$64.33	$74.15	$74.15	$51.98	$49.25	$55.15	$84.00	$106.25	$77.51
1/31/2014	$174.90	$82.38	$58.88	$54.63	$65.13	$74.35	$74.35	$52.38	$49.25	$55.40	$84.00	$106.15	$77.65


Average Peak Price for 12-Month Strip
$90.00
$80.00
$70.00
$60.00
$50.00
$40.00
$30.00
$20.00
$10.00
$0.00
12/17/2013
12/18/2013
12/19/2013
12/20/2013
12/21/2013
12/22/2013
12/23/2013
12/24/2013
12/25/2013
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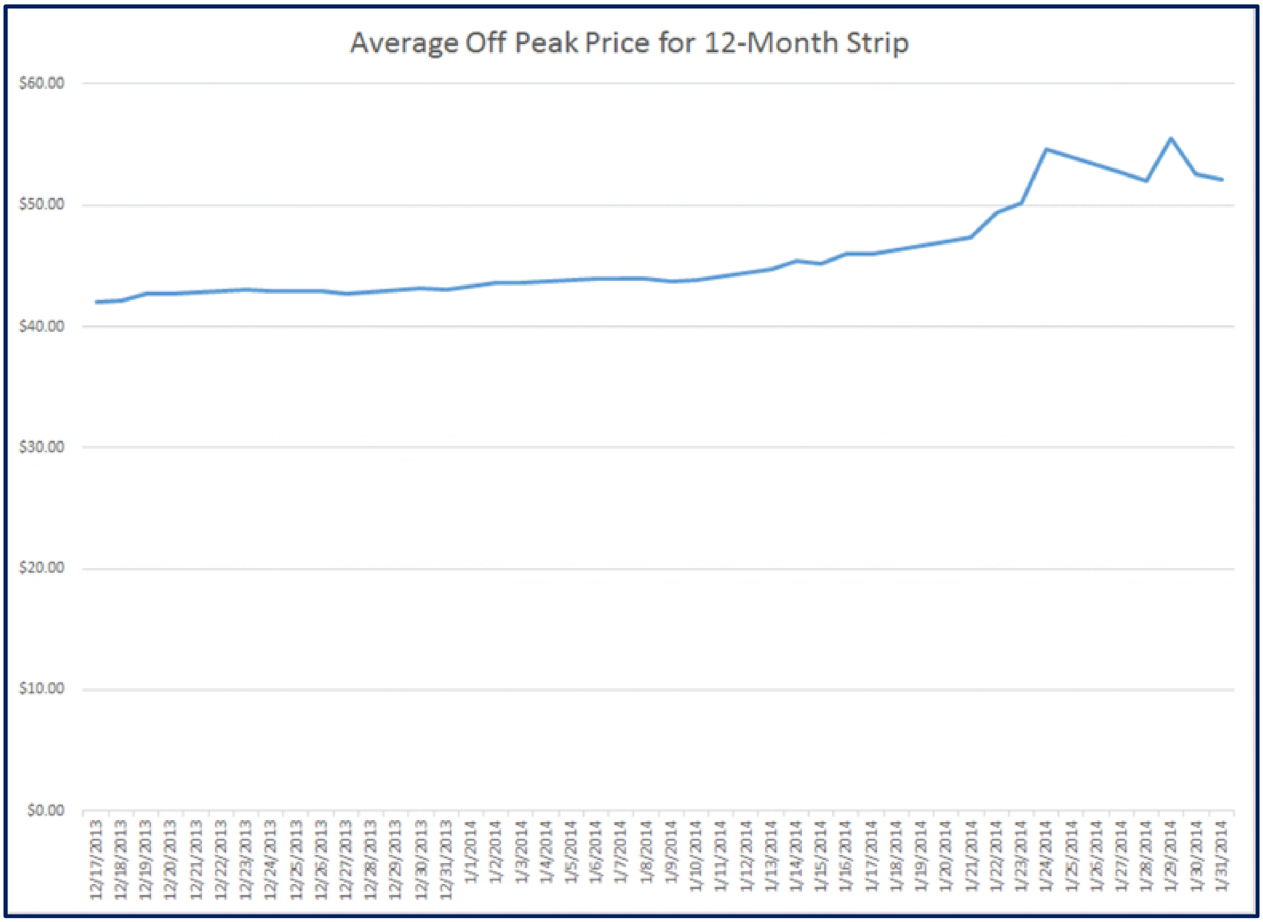
1/27/2014
1/28/2014
1/29/2014
1/30/2014
1/31/2014

NYMEX NY Zone J Off Peak Futures (in $/MWh)

Strip Date	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Average
12/17/2013	$68.75	$40.55	$35.33	$32.75	$34.23	$41.00	$41.00	$32.57	$33.60	$36.50	$48.50	$60.10	$42.07
12/18/2013	$68.50	$40.53	$35.30	$32.75	$34.35	$41.00	$41.00	$32.55	$33.60	$36.50	$48.50	$60.60	$42.10
12/19/2013	$71.75	$42.05	$35.75	$32.85	$34.55	$41.20	$41.20	$32.65	$33.85	$36.65	$48.65	$61.40	$42.71
12/20/2013	$72.78	$42.98	$35.68	$32.83	$34.53	$40.80	$40.80	$32.60	$33.75	$36.55	$48.55	$61.30	$42.76
12/21/2013													
12/22/2013													
12/23/2013	$74.00	$46.10	$34.85	$32.35	$34.50	$41.20	$41.20	$32.90	$33.65	$36.45	$48.65	$61.30	$43.10
12/24/2013	$74.13	$43.05	$35.68	$32.80	$34.50	$41.20	$41.20	$32.60	$33.65	$36.45	$48.65	$61.30	$42.93
12/25/2013													
12/26/2013	$74.13	$42.93	$35.55	$32.68	$34.38	$41.20	$41.20	$32.60	$33.65	$36.45	$48.65	$61.30	$42.89
12/27/2013	$72.63	$45.08	$34.58	$32.80	$34.38	$41.30	$41.30	$32.55	$33.30	$36.25	$48.50	$60.55	$42.77
12/28/2013													
12/29/2013													
12/30/2013	$72.95	$45.70	$34.90	$32.93	$34.50	$41.35	$41.35	$32.95	$33.90	$36.90	$49.15	$61.35	$43.16
12/31/2013	$72.58	$45.75	$34.83	$33.05	$34.63	$41.20	$41.20	$32.95	$33.90	$36.90	$48.90	$61.00	$43.07
1/1/2014													
1/2/2014	$74.68	$46.18	$35.13	$33.13	$34.70	$41.58	$41.07	$33.20	$33.90	$36.90	$48.90	$63.60	$43.58
1/3/2014	$74.93	$46.30	$35.13	$33.05	$34.70	$41.45	$41.45	$33.15	$33.90	$36.90	$48.90	$63.65	$43.63
1/4/2014													
1/5/2014													
1/6/2014	$77.77	$46.30	$35.13	$33.55	$35.43	$41.25	$41.25	$33.13	$33.90	$36.90	$48.90	$63.60	$43.93
1/7/2014	$78.22	$45.45	$35.13	$33.55	$35.43	$41.35	$41.35	$33.18	$34.05	$37.05	$49.05	$63.60	$43.95
1/8/2014	$77.27	$46.08	$35.45	$33.48	$35.50	$41.45	$41.45	$33.02	$34.05	$37.05	$49.65	$63.60	$44.00
1/9/2014	$75.52	$45.95	$35.70	$33.55	$35.33	$40.70	$40.70	$32.95	$34.05	$37.05	$49.65	$63.60	$43.73
1/10/2014	$76.10	$46.28	$35.83	$33.68	$35.33	$40.95	$40.95	$32.85	$34.05	$37.05	$49.65	$63.85	$43.88
1/11/2014													
1/12/2014													
1/13/2014	$80.40	$47.05	$36.75	$34.25	$35.70	$41.85	$41.85	$33.13	$34.40	$37.35	$49.90	$64.90	$44.79
1/14/2014	$83.75	$47.98	$36.78	$34.45	$35.98	$42.25	$42.25	$33.35	$34.75	$37.70	$50.50	$65.80	$45.46
1/15/2014	$81.25	$48.10	$36.65	$34.88	$36.73	$42.20	$42.20	$33.52	$34.50	$37.40	$49.80	$65.75	$45.25
1/16/2014	$87.52	$48.12	$36.78	$34.88	$36.65	$42.60	$42.60	$33.78	$34.90	$37.75	$50.25	$66.25	$46.01
1/17/2014	$88.13	$47.68	$35.78	$34.80	$36.60	$43.10	$43.10	$33.52	$34.75	$37.60	$50.10	$66.40	$45.96
1/18/2014													
1/19/2014													
1/20/2014													
1/21/2014	$96.03	$48.68	$36.62	$34.93	$37.15	$43.95	$43.95	$33.50	$35.15	$38.00	$50.85	$69.00	$47.32
1/22/2014	$115.13	$51.45	$36.58	$35.08	$37.33	$44.10	$44.10	$33.83	$35.15	$38.00	$51.00	$70.75	$49.38
1/23/2014	$120.88	$55.33	$36.85	$34.95	$37.33	$44.10	$44.10	$33.72	$35.15	$38.00	$50.75	$71.50	$50.22
1/24/2014	$153.53	$60.38	$37.88	$35.83	$38.03	$45.25	$45.25	$34.17	$35.90	$38.75	$53.75	$76.75	$54.62
1/25/2014													
1/26/2014													
1/27/2014	$142.13	$56.38	$36.75	$35.20	$37.75	$44.25	$44.25	$33.88	$35.40	$38.25	$52.75	$75.00	$52.67
1/28/2014	$135.00	$52.55	$37.13	$35.45	$37.90	$44.85	$44.85	$33.65	$35.25	$38.50	$52.75	$75.75	$51.97
1/29/2014	$160.25	$61.38	$38.75	$36.33	$38.58	$45.65	$45.65	$34.15	$35.50	$39.15	$53.75	$76.75	$55.49
1/30/2014	$134.05	$59.75	$38.13	$35.83	$38.13	$44.50	$44.50	$33.73	$35.15	$38.75	$53.25	$74.50	$52.52
1/31/2014	$130.00	$58.13	$38.13	$35.83	$39.68	$44.75	$44.75	$33.77	$34.90	$38.60	$53.10	$74.50	$52.18



Average Off Peak Price for 12-Month Strip
$60.00
$50.00
$40.00
$30.00
$20.00
$10.00
$0.00
12/17/2013
12/18/2013
12/19/2013
12/20/2013
12/21/2013
12/22/2013
12/23/2013
12/24/2013
12/25/2013
12/26/2013
12/27/2013
12/28/2013
12/29/2013
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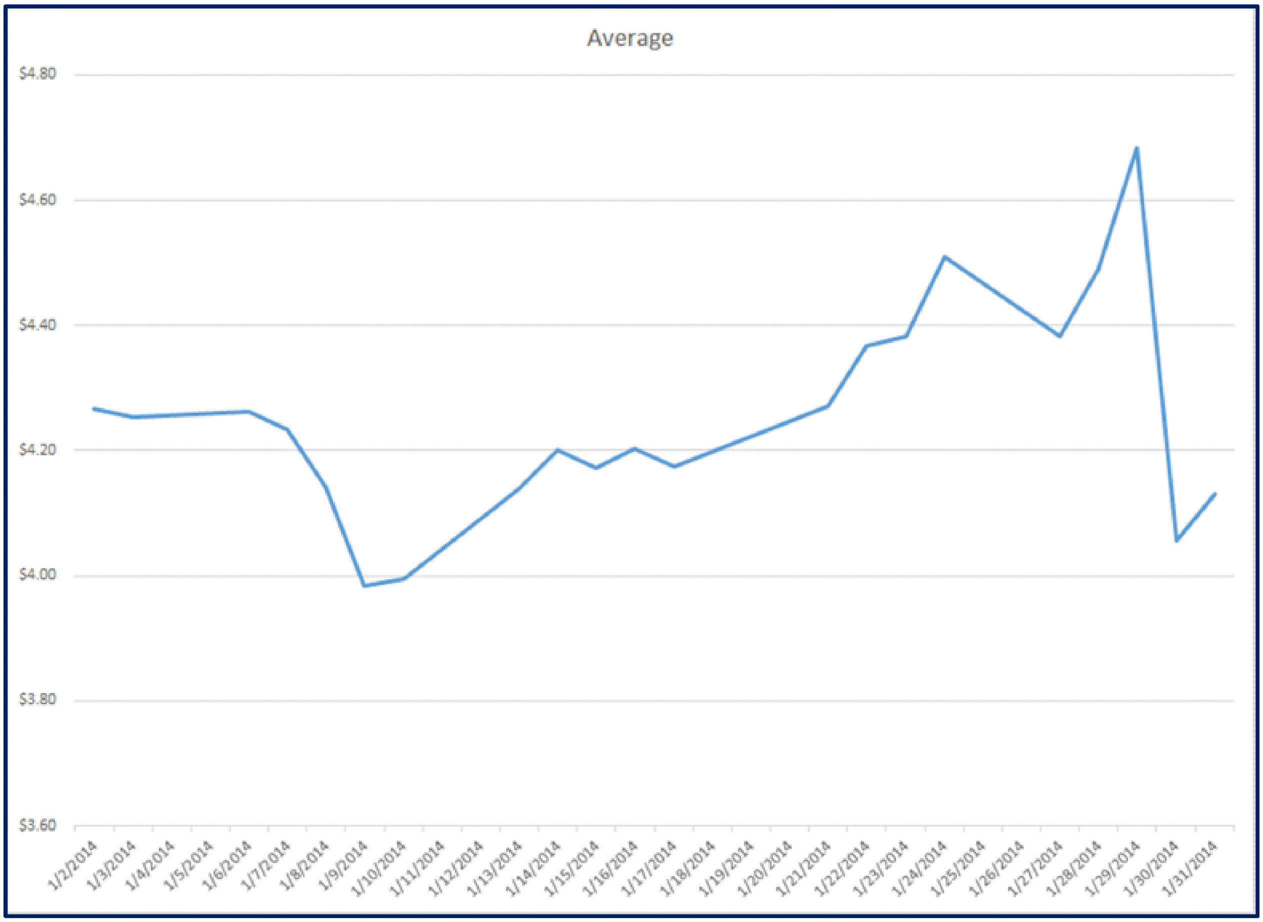
1/25/2014
1/26/2014
1/27/2014
1/28/2014
1/29/2014
1/30/2014
1/31/2014

NYMEX Henry Hub Futures (in $/MMBtu)

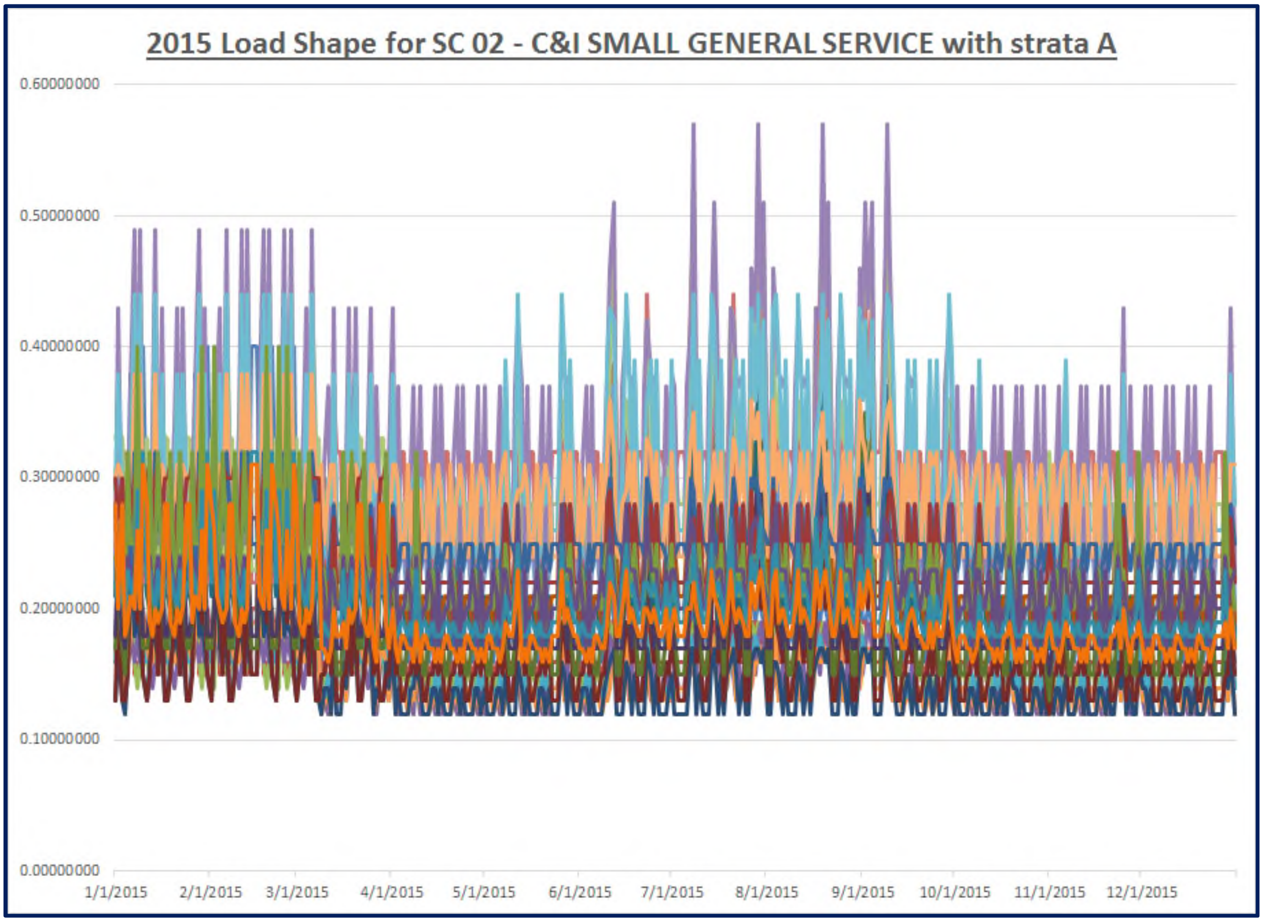
Strip Date	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Average
12/17/2013	$4.30	$4.29	$4.15	$4.14	$4.16	$4.19	$4.20	$4.18	$4.20	$4.25	$4.36	$4.45	$4.24
12/18/2013	$4.27	$4.26	$4.12	$4.11	$4.13	$4.16	$4.16	$4.15	$4.17	$4.21	$4.33	$4.42	$4.21
12/19/2013	$4.49	$4.47	$4.21	$4.19	$4.21	$4.23	$4.24	$4.23	$4.25	$4.28	$4.40	$4.49	$4.31
12/20/2013	$4.47	$4.45	$4.18	$4.15	$4.16	$4.19	$4.20	$4.19	$4.20	$4.24	$4.36	$4.45	$4.27
12/21/2013													
12/22/2013													
12/23/2013	$4.52	$4.50	$4.19	$4.15	$4.17	$4.19	$4.20	$4.19	$4.21	$4.25	$4.36	$4.45	$4.28
12/24/2013	$4.47	$4.44	$4.17	$4.14	$4.16	$4.18	$4.19	$4.18	$4.20	$4.24	$4.35	$4.44	$4.26
12/25/2013													
12/26/2013	$4.48	$4.44	$4.22	$4.19	$4.21	$4.24	$4.25	$4.24	$4.26	$4.29	$4.40	$4.48	$4.31
12/27/2013	$4.37	$4.34	$4.18	$4.16	$4.18	$4.21	$4.22	$4.21	$4.23	$4.27	$4.38	$4.46	$4.27
12/28/2013													
12/29/2013													
12/30/2013	$4.43	$4.38	$4.24	$4.22	$4.24	$4.27	$4.28	$4.27	$4.29	$4.33	$4.43	$4.51	$4.32
12/31/2013	$4.23	$4.19	$4.11	$4.10	$4.11	$4.15	$4.16	$4.15	$4.16	$4.20	$4.31	$4.40	$4.19
1/1/2014													
1/2/2014	$4.32	$4.30	$4.18	$4.17	$4.19	$4.22	$4.23	$4.22	$4.24	$4.28	$4.38	$4.47	$4.27
1/3/2014	$4.30	$4.28	$4.17	$4.16	$4.17	$4.20	$4.22	$4.21	$4.22	$4.27	$4.37	$4.46	$4.25
1/4/2014													
1/5/2014													
1/6/2014	$4.31	$4.28	$4.18	$4.17	$4.18	$4.21	$4.23	$4.22	$4.23	$4.28	$4.39	$4.47	$4.26
1/7/2014	$4.30	$4.27	$4.15	$4.14	$4.16	$4.19	$4.20	$4.18	$4.20	$4.25	$4.35	$4.43	$4.23
1/8/2014	$4.22	$4.18	$4.06	$4.04	$4.06	$4.09	$4.10	$4.09	$4.11	$4.15	$4.26	$4.35	$4.14
1/9/2014	$4.01	$3.98	$3.90	$3.89	$3.91	$3.94	$3.95	$3.94	$3.96	$4.01	$4.12	$4.20	$3.98
1/10/2014	$4.05	$4.02	$3.91	$3.89	$3.92	$3.95	$3.96	$3.95	$3.96	$4.01	$4.12	$4.20	$3.99
1/11/2014													
1/12/2014													
1/13/2014	$4.27	$4.22	$4.06	$4.04	$4.06	$4.09	$4.09	$4.08	$4.09	$4.13	$4.24	$4.32	$4.14
1/14/2014	$4.37	$4.32	$4.11	$4.09	$4.11	$4.14	$4.15	$4.13	$4.15	$4.18	$4.29	$4.37	$4.20
1/15/2014	$4.33	$4.28	$4.09	$4.06	$4.09	$4.11	$4.12	$4.11	$4.12	$4.16	$4.27	$4.35	$4.17
1/16/2014	$4.38	$4.32	$4.11	$4.09	$4.11	$4.14	$4.15	$4.14	$4.15	$4.19	$4.29	$4.37	$4.20
1/17/2014	$4.33	$4.26	$4.08	$4.07	$4.09	$4.12	$4.13	$4.11	$4.12	$4.17	$4.27	$4.35	$4.17
1/18/2014													
1/19/2014													
1/20/2014													
1/21/2014	$4.43	$4.36	$4.18	$4.17	$4.19	$4.22	$4.22	$4.21	$4.22	$4.26	$4.36	$4.44	$4.27
1/22/2014	$4.69	$4.55	$4.27	$4.25	$4.26	$4.29	$4.30	$4.28	$4.29	$4.33	$4.42	$4.51	$4.37
1/23/2014	$4.73	$4.58	$4.29	$4.26	$4.27	$4.30	$4.30	$4.29	$4.30	$4.34	$4.44	$4.52	$4.38
1/24/2014	$5.18	$5.00	$4.42	$4.33	$4.34	$4.36	$4.36	$4.34	$4.35	$4.39	$4.49	$4.58	$4.51
1/25/2014													
1/26/2014													
1/27/2014	$4.85	$4.67	$4.29	$4.23	$4.25	$4.27	$4.27	$4.25	$4.27	$4.31	$4.42	$4.51	$4.38
1/28/2014	$5.03	$4.94	$4.40	$4.32	$4.33	$4.36	$4.35	$4.33	$4.34	$4.39	$4.50	$4.59	$4.49
1/29/2014	$5.56	$5.47	$4.56	$4.45	$4.46	$4.48	$4.47	$4.45	$4.46	$4.51	$4.62	$4.72	$4.68
1/30/2014	$0.00	$5.01	$4.36	$4.28	$4.30	$4.33	$4.32	$4.30	$4.32	$4.37	$4.49	$4.60	$4.06
1/31/2014	$0.00	$4.94	$4.45	$4.38	$4.40	$4.42	$4.42	$4.39	$4.41	$4.47	$4.60	$4.70	$4.13



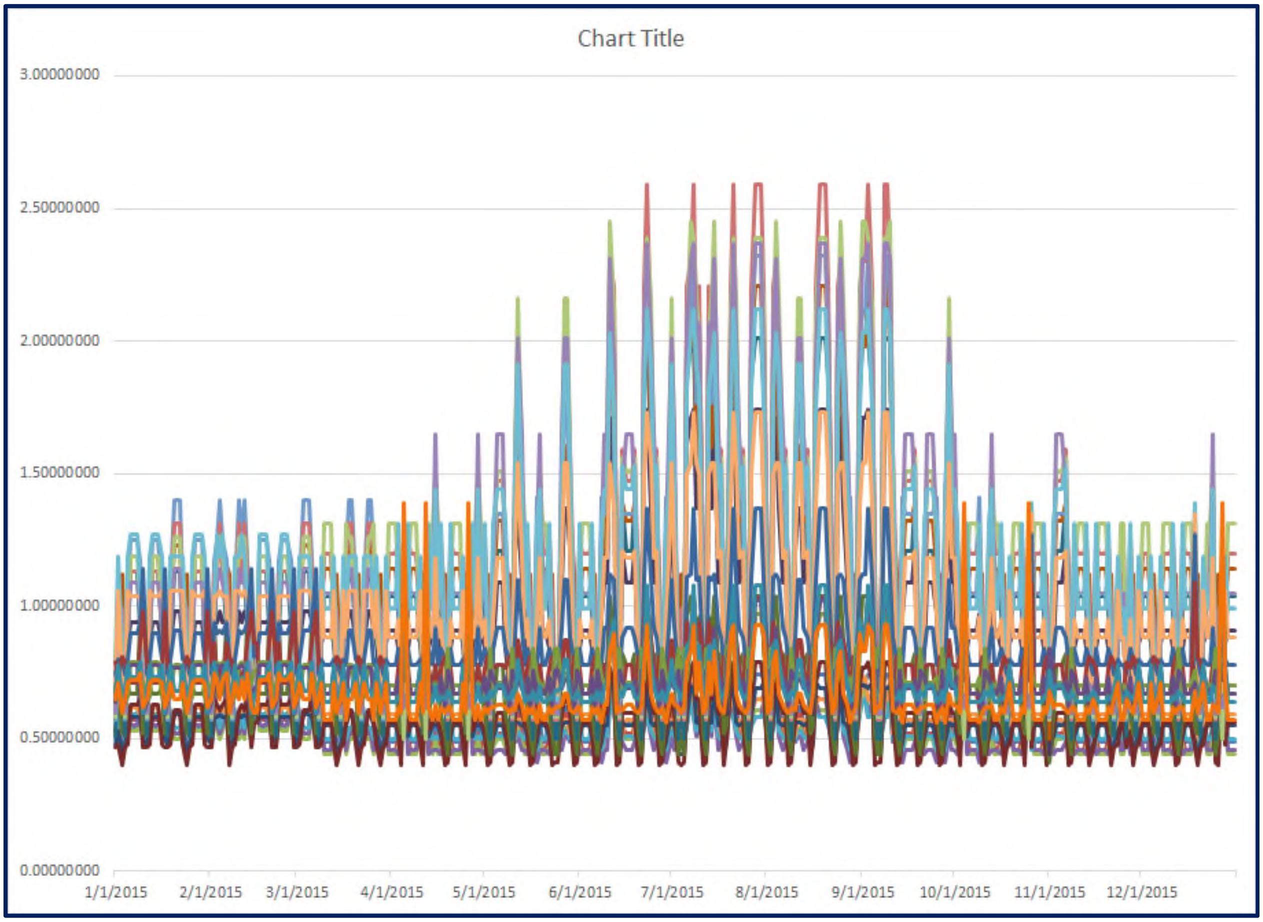
Source: *Data collected by Intelometry's inRetail system from NYMEX website*
http://www.cmegroup.com/market-data/settlements.html

Exhibit 1.6: Customer Load Shape Variations

2015 Load Shape Graph for SC 02 - C&I SMALL GENERAL SERVICE with strata A



2015 Load Shape Graph for SC 02 - C&I SMALL GENERAL SERVICE with strata B



Source: *Data generated by Intelometry's inRetail system utilizing ConEd's WRF provided posted on ConEd's RAIS website* *https://apps.coned.com/retailaccess/ra_start.asp?passUID=0&passUCD=V*

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Exhibit 1.7: New York Utility Loss Factors

Utility	Utility Short Name	Secondary Loss Factor Percentages	Source
Central Hudson Gas & Electric Corporation	Central Hudson	2.85%	Tariff PSC No: 15, Leaf 104
Long Island Power Authority	LIPA	6.69%	LIPA Statement No. 2, Statement of Energy and Peak Demand Losses
Niagara Mohawk Power Corporation	NIMO	8.40%	Tariff PSC No: 220, Leaf 216
New York State Electric and Gas	NYSEG	7.28%	Tariff PSC No: 120, Leaf 254.2
Orange and Rockland Utilities, Inc.	O&R	7.99%	Retail Access Implementation Plan and Operating Procedure, Page 30
Rochester Gas and Electric Corporation	RGE	6.93%	NYSEG/RG&E Electric Supplier Manual, Section 6, Page 10 (6-10)

Exhibit 1.8: NYISO Strip Auction Prices for NYC and G-J Locality

Strip Auction Results for UCAP
(in $/kW-Month)

	Summer 2014	Winter 2014-2015	Summer 2015	Winter 2015-2016	Summer 2016
G-J Locality	$9.96	$5.90	$8.50	$3.73	$8.25
NYC	$16.24	$8.45	$15.50	$6.67	$10.99

	Summer 2014	Winter 2014-2015	Summer 2015	Winter 2015-2016	Summer 2016
G-J Locality as % of NYC Price	61%	70%	55%	56%	75%

Source: *NYISO website*
http://icap.nyiso.com/ucap/public/auc_view_strip_detail.do

Guy Sharfman
Principal & Managing Director

KEY QUALIFICATIONS

Guy Sharfman has a broad range of operational and consulting experience in the energy industry, and is a recognized industry expert in the retail and wholesale electricity arenas. Guy has held key leadership roles in risk management, structuring and pricing, hedging and position management, and wholesale and retail market development and expansion. In his present roll Guy oversees Intelometry Inc.'s data services business which encompasses the development, collection, maintenance and distribution of retail energy data and market reports utilized by energy companies, brokers and aggregators to support retail energy operations and analysis across U.S. markets. Guy also heads Intelometry's consulting business which specializes in retail energy market operations, market strategy, regulation and valuations.

Guy has testified and provided litigation support in cases before a number of state utility commissions. Guy's industry experience includes buying and selling power, creating hedging strategies to manage risks associated with term supply, developing physical delivery capabilities for companies to serve new markets, electricity product structuring and pricing, wholesale and retail contract negotiation, utility tariff modeling, power plant value assessment, supply and demand forecasting, benchmarking evaluations, and electric procurement analyses.

PREVSIOUS INDUSTRY EXPERIENCE

Econ One Research, Inc. (2001 - 2004)

Director of Energy Strategy responsible for establishing a new business consulting practice centering on the power and natural gas industries in North America. Acquired and managed consulting projects for major energy companies, law firms and energy publications. Conducted studies and gave presentations on the future of energy markets to clients and associations.

Enron Wholesale Services (2001-2002)

Managed Enron's retail power positions and developed new markets in the Central region. Created and managed retail power forward curves into all major control areas in the ECAR, MAIN and MAPP regions. Structured financial and physical products for retail power customers in Illinois, Michigan, Ohio and Virginia. Assisted Enron regulatory affairs group in various energy proceedings in front of FERC and State Commissions in Illinois, Ohio and Michigan.

Nicor Energy, L.L.C. (2000-2001)

Manager of Electric Services responsible for structuring and pricing retail electricity in Illinois control areas. Trained and supervised Nicor Energy's power pricing desk. Negotiated electric supply agreements with wholesale companies to supply portions of Nicor Energy's retail load obligations. Developed retail electric service capabilities for Nicor Energy in Michigan and Ohio control areas. Developed a Green Power supply option for Nicor Energy in Illinois.

Analytical Support Network, Inc. (1998-2000)

Performed open access pricing for an alternative retail electric supplier. Constructed retail power pricing models for the Commonwealth Edison control area. Created indices that predicted a company's open access savings potential based on variables such as SIC codes in order to develop a target market. Conducted open access option assessment for various electric consumers. Performed all types of economic cost and efficiency analyses including contract assessment, price and demand forecasting, future revenue expectations and efficiency of operations assessments. Assessed expert testimony and prepared cross-examination questions for legal staff. Assisted in the testimony strategy of expert witnesses testifying in various electric deregulation proceedings before the Illinois Commerce Commission and the Public Utility Commission of Wisconsin.

SELECT CONSULTING EXPERIENCE

System Implementation for Various Retail Energy Companies

Engagement Director and Project Manager for the implementation of Intelometry's inRetail product suite for various national energy marketers. The product suite installation focused on processing and profiling historic customer load data, managing forward curve and market spot price data, pricing and structuring retail power deals for large and small consumers, load forecasting, settlements, position management and integrating to existing legacy systems.

Market Monitoring Services and Support

Directs the creation, service and support of Intelometry's inMonitor service, which assesses the headroom between electric utility tariff costs and the cost to serve typical retail customers in deregulated markets across the country. This service includes the building and maintenance of a library of utility tariffs in conjunction with the estimation of retail supply costs that include forward energy, capacity, ancillary services, risks and other retail uplift costs incurred in supplying retail customers.

Structured Supply Assessment

Managed team to assist client in finding Midwest counterparties for wholesale supply to back their retail load obligations, develop portfolio management strategies, and determine alternate methods of procurement.

Market Segmentation

Researched and developed an individual market profile for each of nineteen utilities across five states for the one to fifteen megawatt customer segment. Constructed tables for each utility depicting the number of existing commercial and industrial customers falling in each of seven demand class categories contained within the one to fifteen megawatt segment. Developed an expected annual kWh consumption range by utility for each demand class category for both commercial as well as industrial customer groups.

Michigan Market Entry and Operations Strategy

Managed team to perform a comprehensive market assessment to advise client of entry strategy into the Michigan retail natural gas and power market. Assessment included a full review of wholesale supply options, regulatory issues, transactional issues, value proposition assessment, and recommendations on product structures and risks.

Transition Charge Forecast

Conducted a forecast of Illinois transition charges for the ComEd control area for the entire transition (the end of the Illinois retail electricity deregulation transition period). Assessed how changes in the current forward market and proposed changes in ComEd distribution rates would affect transition charges over time. Analyzed how changes in transition charges would affect the viability of the retail electric market in Illinois.

Electricity Rate Analysis

Conducted rate audits and analysis for CBS facilities in New York City in order to determine if CBS was overcharged for electric service. Facilitated negotiations between CBS and opposing parties to settle outstanding disputes over energy bills. Assessed whether previous charges allowed under current lease agreements.

Market Value Calculation Audit

Conducted an audit of market setting "Market Value Energy" numbers put forth by Commonwealth Edison Company ("ComEd") on an annualized basis. Used snapshots of the into Cinergy peak forward market, historical PJM hourly price shapes and into ComEd historical off peak prices to recreate ComEd's output and assess how changes in the wholesale market have affected the viability of the Illinois retail market since the numbers have been put forth.

TESTIFYING EXPERIENCE

Illinois Commerce Commission

Provided testimony before the Illinois Commerce Commission ("ICC") in a docket to determine distribution rate increases and related riders for Commonwealth Edison Company ("ComEd"). Prepared analysis and related testimony and exhibits illustrating historical and forecasted distribution and bundled rate costs paid by ComEd customer classes.

Massachusetts Department of Public Utilities

Provided an expert report and testimony before the Massachusetts Department of Public Utilities ("Department") regarding NSTAR Electric's filed request to enter into two proposed purchased power agreements ("PPA") for wind generation. The report and related testimony assessed the value of the wind PPAs to NSTAR customers and measured the impacts of the PPAs on existing default rates.

Connecticut Department of Public Utility Control

Provided an expert report to the Connecticut Department of Public Utility Control ("Department") regarding historical cost differentials between CL&P regulated and market prices. Participated in a round-table style hearing before the Department to determine the benefits and detriments of allowing Connecticut utilities to engage in portfolio management.

Public Service Commission of Maryland

Testified on behalf of a prominent energy company in a case before the Public Service Commission of Maryland ("PSCM") regarding historical cost differentials between BG&E regulated tariff prices and PJM market prices. Cross examination was conducted in front of the five Maryland Commissioners, who were interested in understanding the impacts of default price volatility that would be associated with a decrease in default rate price levels.

Pennsylvania Public Utilities Commission

Testified on behalf of a coalition of energy companies in a case before the Pennsylvania Public Utilities Commission ("PPUC") regarding historical cost differentials between Duquesne Light regulated tariff prices and PJM market prices. Testimony analyzed the savings that residential and small commercial customers would have attained had they procured their electric requirements directly from the market, as opposed to Duquesne Light tariffs.

Public Utilities Commission of Ohio

Testified on behalf of a coalition of energy companies and a manufacturer's association in a case before the Public Utilities Commission of Ohio (PUCO) on the market impacts of a rate stabilization plan proposed by First Energy Corporation. Testimony analyzed the impacts that the proposed plan would exert on regional energy markets, and provided the PUCO with alternative options to the plan including a wholesale Provider of Last Resort (POLR) auction.

Illinois Commerce Commission

Testified in a hearing before the Illinois Commerce Commission to determine how energy values that set alternative electricity rates for all investor owned Illinois electric utilities should be calculated. Used the Retail Power Index ("RPI"), which I construct and publish Platts Megawatt Daily and Power Markets Week, in testimony to demonstrate the inadequacies of the current energy value calculation. Testified as to which remedies to the current calculation would improve market efficiency.

Illinois Commerce Commission

Testified in a proceeding before the Illinois Commerce Commission to set an electricity default rate for Commonwealth Edison Company ("ComEd"). In testimony, presented an alternative tariff design to the one proposed by ComEd that offered greater transparency and allowed for more adequate cost recovery. The final negotiated design incorporated many of the revisions that I proposed.

ADDITIONAL EXPERT ENGAGEMENTS

Honorarium to discuss agent-based modeling of electricity markets at Argon National Laboratory, Chicago, Illinois

Attended an honorarium for power marketers to assist Argon National Laboratory in building an electricity market modeling system that will allow regulators to anticipate market gaming behavior on the part of generators and power marketers in the event of market rule changes. Discussed the differences in market structures between current independent system operators and how energy companies use these different structures to create arbitrage opportunities. Offered insights into trading behavior in different NERC regions across the United States in real time, day ahead and term wholesale and retail markets.

Illinois Commerce Commission Electric Market Roundtable, Chicago, Illinois

Participated in the annual electric market roundtable discussions at the Illinois Commerce Commission. The Chairman of the Illinois Commerce Commission hosts the roundtable discussions. Participants include CEOs and CFOs of energy firms, leaders of commercial and industrial consumer groups as well as selected industry experts. The topics center around the development of competition in the electricity markets in Illinois both on a wholesale and retail level and what can be done to further foster competition's development.

Operational Task Force for the Midwest Independent System Operator, Indianapolis, Indiana

Attended an operational task force comprised of representatives from transmission owners and market participants to resolve operational issues for the Midwest Independent System Operator. Discussed issues involving methods of interaction and settlement between the transmission owners participating in the Midwest Independent System operator, independent marketers serving or planning to serve retail load, and municipalities.

PRESENTATIONS AND PUBLISHED WORKS

"What happened to Enron? (And other issues in the energy industry)", presentation before the Rotary Club of Chicago Financial District.

"After Enron, Will Power Competition Survive?" Natural Gas - The Monthly Journal for Producers, Marketers, Pipelines, Distributors, and End-Users, Wiley Periodicals, Inc.

"The Impacts of The Enron Bankruptcy and the California Crisis on The Future of Wholesale and Retail Power Markets" Presentation to the International Association for Energy Economics.

The Retail Power Index ("RPI") published previously in Platts Megawatt Daily and Power Markets Week.

EDUCATION

MA Economics, DePaul University at Chicago, IL, 1998

BA Economics, University of Illinois at Champaign/Urbana, IL, 1994