

#### PENDING PETITION MEMO

#### Date: 11/4/2004

TO : Office of General Counsel

FROM: CENTRAL OPERATIONS

UTILITY: SITHE ENERGIES, INC.

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SUBJECT: 04-E-1364

Joint Petition of Sithe Energies, Inc., Dynegy New York Holdings, Inc., Exelon SGC, Inc., Exelon New England Power Marketing, L.P., RCSE, LLC and ExRes SHC, Inc. for a Declaratory Ruling Regarding Application of Sections 70 and 83 of the Public Service Law to a proposed transfer of indirect ownership interests in Sithe Energies.

\*\*\* COPY TO OFFICE OF ELECTRICITY AND ENVIRONMENT \*\*\*  $\zeta \in \zeta^{-1}$  . . . . . . .

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# Via Hand Delivery

November 3, 2004

Hon. Jaclyn A. Brilling Acting Secretary New York State Public Service Commission Executive Office 14<sup>th</sup> Floor 3 Empire State Plaza Albany, New York 12223-1350

Re: Case 04-E-\_\_\_\_ - In the Matter of Sithe Energies, Inc., Dynegy New York Holdings Inc., Exelon SHC, Inc., Exelon New England Power Marketing, L.P., RCSE, LLC and ExRes SHC, Inc. Joint Petition for a Declaratory Ruling Regarding the Application of Sections 70 and 83 of the Public Service Law.

Dear Secretary Brilling:

Please find enclosed for filing with the New York State Public Service Commission ("Commission") an original and five copies of the Verified Joint Petition for Declaratory Ruling of Sithe Energies, Inc. ("Sithe"), Dynegy New York Holdings Inc. ("Dynegy"), Exelon SHC, Inc. ("Exelon SHC"), Exelon New England Power Marketing, L.P., RCSE, LLC ("RCSE") and ExRes SHC, Inc.

The Petition seeks a Declaratory Ruling that the Commission will not review or regulate under Sections 70 and 83 of the Public Service Law a proposed transfer of indirect ownership interests in Sithe currently held by Exelon SHC and RCSE ultimately to Dynegy in a two step transaction (the "Transaction") which will result in Sithe becoming a wholly-owned, indirect subsidiary of Dynegy.

The Petitioners respectfully request that the Commission expedite approval of this Petition and act as soon as possible, but in any event by January 12, 2005.

If you have any questions arising in connection with this filing, please contact David B. Johnson at (518) 465-9313.

Very truly yours,

READ AND LANIADO, LLP Attorneys for Sithe Energies, Inc.

By:

David B. Johnsøn

cc: Kent D. Murphy, Esq. Steven M. Kramer, Esq. Betsy Carr, Esq. Scott G. Silverstein, Esq.

# ORIGINAL

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#### STATE OF NEW YORK PUBLIC SERVICE COMMISSION

In the Matter of Sithe Energies, Inc., Dynegy New York Holdings Inc., Exelon SHC, Inc., Exelon New England Power Marketing, L.P., RCSE, LLC and ExRes SHC, Inc. Joint Petition for a Declaratory Ruling Regarding the Application of Sections 70 and 83 of the Public Service Law.

Case 04-E-

#### VERIFIED JOINT PETITION FOR DECLARATORY RULING

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Dated: November 3, 2004 Albany, New York

In the Matter of Sithe Energies, Inc., Dynegy New York Holdings Inc., Exelon SHC, Inc., Exelon New England Power Marketing, L.P., RCSE, LLC and ExRes SHC, Inc. Joint Petition for a Declaratory Ruling Regarding the Application of Sections 70 and 83 of the Public Service Law.

Case 04-E-

#### VERIFIED JOINT PETITION FOR DECLARATORY RULING

# I. INTRODUCTION

Pursuant to Part 8 of the Public Service Commission's ("Commission") Rules and Regulations, 16 NYCRR Part 8, Sithe Energies, Inc. ("Sithe"), Dynegy New York Holdings Inc. ("Dynegy"), Exelon SHC, Inc. ("Exelon SHC"), Exelon New England Power Marketing, L.P. ("Exelon NEPM"), RCSE, LLC ("RCSE"), and ExRes SHC, Inc. ("ExRes SHC") (collectively, "Petitioners") hereby petition the Commission for a Declaratory Ruling that the Commission will not review or regulate under Sections 70 and 83 of the Public Service Law ("PSL") a proposed transfer of indirect ownership interests in Sithe currently held by Exelon SHC and RCSE ultimately to Dynegy in a two step transaction (the "Transaction") which will result in Sithe becoming a wholly-owned, indirect subsidiary of Dynegy.<sup>1</sup>

Currently, Exelon SHC and RCSE each own a 50 percent interest in Sithe. These interests are held indirectly, with Exelon SHC and RCSE each owning a 50 percent interest in ExRes which, in turn, owns an indirect 55.99 percent in Sithe and an indirect 100 percent interest in National Energy Development Inc. which, in turn, owns a 44.01 percent interest in Sithe.

<sup>&</sup>lt;sup>1</sup> As explained below, the Petitioners request that the Commission declare that it will not review or regulate under Sections 70 and 83 of the PSL approval of each step of the Transaction individually, as consummation of the first step of the Transaction is not conditioned upon the ultimate transfer to Dynegy in the second step of the Transaction.

The Transaction is expected to occur in two near-simultaneous steps. First, Exelon NEPM will acquire all of RCSE's interests in ExRes pursuant to a call option granted under a Put and Call Agreement dated November 25, 2003, as amended by an Agreement and Amendment to Put and Call Agreement dated September 29, 2004 (together, the "Put/Call Agreement") ("Step 1" or the "Call Transaction"). Immediately thereafter, Exelon NEPM and Exelon SHC will each transfer their interests in ExRes to Dynegy pursuant to a Stock Purchase Agreement dated November 1, 2004 (the "Stock Purchase Agreement") ("Step 2" or the "Sithe Transfer").<sup>2</sup> Following the completion of Step 2, Sithe will be wholly-owned by Dynegy by virtue of Dynegy's 100 percent ownership of ExRes.

The Commission has held that there is a presumption that it will not review or regulate under Sections 70 and 83 of the PSL a transfer of upstream ownership interests of owners of wholesale merchant generating facilities, including facilities owned by affiliates of Sithe, unless there is a potential for harm to the interests of captive utility ratepayers, including the exercise of market power, sufficient to override the presumption.<sup>3</sup> This Transaction does not raise the potential for the exercise of market power or any other detriment to captive New York ratepayers. The Transaction will have no adverse effect on competition. Accordingly, the

<sup>3</sup> See, Case 03-E-1136, Re Sithe Energies, Inc., Declaratory Ruling on Review of Ownership Transactions (October 28, 2003); Case 02-E-1184, Sithe Energies, Inc. and Apollo Energy, LLC., Declaratory Ruling on Review of Stock Transaction (November 26, 2002); Case 01-E-1680, Reliant Resources et al., Declaratory Ruling on Review of Stock Transfer, (December 20, 2001); Case 00-E-2017, GPU International, Inc. and MEP Investments, LLC, Declaratory Ruling on Review of Stock Transfer (January 4, 2001); Case 00-E-1585, Sithe Energies, Inc., Exelon (Fossil) Holdings, Inc. and PECO Energy Company, Order on Review of Stock Transfer and Other Transactions (November 16, 2000); Case 91-E-0350, Wallkill Generating Company, L.P., Petition on Regulation, Order Establishing Regulatory Regime (April 11, 1994).

<sup>&</sup>lt;sup>2</sup> At Exelon NEPM's option, it also may cause RCSE to transfer its interests in Sithe directly to Dynegy in exchange for certain payments by Exelon NEPM.

presumption should prevail and the Commission should issue a Declaratory Ruling that it will not review or regulate the Transaction under Sections 70 and 83 of the PSL.

The Petitioners respectfully request that the Commission expedite approval of this Petition and act as soon as possible, but in any event by January 12, 2005.

# **II. DESCRIPTION OF THE PETITIONERS**

# A. Sithe Energies, Inc.

Sithe, a Delaware corporation, is engaged primarily, through various subsidiaries, in the operation of non-utility generation facilities. Separate affiliates of Sithe own and operate three electric-generating facilities in New York that have been deemed electric and steam corporations subject to the Commission's jurisdiction under PSL §§ 2(12) and 2(13). Sithe's affiliates also own and operate other facilities in New York that are not subject to the Commission's jurisdiction facilities as defined in PSL § 2(2-a).

The three facilities deemed to be jurisdictional are the Independence facility, a 1060 megawatt gas-fired generation facility located in Scriba, New York, the AG-Energy facility, a 79 megawatt gas-fired generation facility located in Ogdensburg, New York, and the Power City facility, an 80 megawatt gas-fired generation facility located in Massena, New York. Their owners/operators are Sithe/Independence Power Partners, L.P. ("Sithe/Independence"), AG-Energy, L.P. ("AG-Energy") and Power City Partners, L.P. ("Power City"), respectively. Sithe/Independence, AG-Energy and Power City have been determined to be electric corporations (and steam corporations except for Power City) subject to the lightened regulatory

3

regime fashioned by the Commission for generators operating in a competitive environment.<sup>4</sup>

B. Dynegy

Dynegy is a direct wholly-owned subsidiary of Dynegy Inc., which provides electricity, natural gas and natural gas liquids to customers throughout the United States. Dynegy Inc. owns and operates a diverse portfolio of assets, including power plants totaling 11,885 megawatts of net generating capacity and gas processing plants that process approximately 1.8 billion cubic feet of natural gas per day. Through its subsidiaries, Dynegy Inc. is engaged in the gathering, processing, fractionation, storage, transportation and marketing of natural gas and natural gas liquids, as well as the generation and marketing of wholesale electric power and retail electric power to large commercial and industrial customers in Texas, Illinois, Michigan and New York. Dynegy Roseton, L.L.C., which operates a gas and oil-fired generation facility of approximately 1,200 MW ("Roseton"), and Dynegy Danskammer, L.L.C., which operates a coal, gas, and oil-fired facility of approximately 500 MW ("Danskammer"). The Danskammer and Roseton electric generating plants are located in Newburgh, NY.

- C. Exelon
  - (i) <u>Exelon SHC, Inc.</u>

Exelon SHC is a Delaware corporation and an indirect wholly-owned subsidiary of Exelon Corporation ("Exelon"), a registered holding company. Exelon SHC owns a 50 percent interest in ExRes and, therefore, an indirect 50 percent interest in Sithe.

<sup>&</sup>lt;sup>4</sup> Case 02-M-1443, *Sithe Independence Power Partners, L.P.*, Order Providing for Lightened and Incidental Regulation and Granting a Certificate of Public Convenience and Necessity (January 23, 2003, amended February 28, 2003); Case 02-M-1034, *AG-Energy, L.P.*, Order Providing for Lightened and Incidental Regulation and Granting a Certificate of Public Convenience and Necessity (November 25, 2002); Case 98-E-1961, *Power City Partners, L.P.*, Order Providing for Lightened Regulation (September 30, 1999).

#### (ii) <u>Exelon New England Power Marketing, L.P.</u>

Exelon NEPM is a Delaware limited partnership and an indirect wholly-owned subsidiary of Exelon. In Step 1 of the Transaction, Exelon NEPM will acquire RCSE's 50 percent interest in ExRes which, in Step 2 of the Transaction, will be transferred to Dynegy.

#### (iii) <u>ExRes SHC, Inc.</u>

ExRes is a Delaware corporation owned equally by Exelon SHC and RCSE. ExRes owns a 100 percent interest in ExRes Power Holdings, Inc., which in turn owns a 100 percent interest in Sithe through its indirect 55.99 percent interest in Sithe and through its indirect 100 percent interest in National Energy Development Inc. ("NEDI")<sup>5</sup> which, in turn, owns a 44.01 percent interest in Sithe. In Step 1 of the Transaction, RCSE will transfer its 50 percent interest in ExRes to Exelon NEPM. In Step 2 of the Transaction, Exelon NEPM and Exelon SHC will transfer their combined 100 percent interests in ExRes to Dynegy.

# D. RCSE, LLC

RCSE is a limited liability company organized under the laws of the State of Delaware. RCSE is owned approximately 83% by Reservoir Capital Partners, L.P., a Delaware limited partnership, and 17% by Reservoir Capital Master Fund, L.P., a Cayman Islands exempted limited partnership.

Reservoir Capital Partners, L.P. has one general partner, Reservoir Capital Group, L.L.C., a Delaware limited liability company, and limited partners that are primarily individual, family and institutional investors. Reservoir Capital Partners, L.P. is a private investment fund that makes investments in various industry sectors. Reservoir Capital Group, L.L.C., which is

<sup>&</sup>lt;sup>5</sup> The Petitioners currently contemplate that, prior to the Transaction, NEDI may be merged with and into Sithe, such that ExRes Power Holdings, lnc. will own a 100 percent direct, rather than partially indirect, interest in Sithe at the time of the Sithe Transfer (the "NEDI Merger").

responsible for all management and investment decisions of Reservoir Capital Partners, L.P., is managed by a managing member, which is controlled by certain individuals responsible for management of the managing member.<sup>6</sup>

Reservoir Capital Master Fund, L.P. is a private investment fund that makes investments in various industry sectors. RCMF, Ltd., a Cayman Islands exempted company, is the sole limited partner of Reservoir Capital Master Fund, L.P. Reservoir Capital Overseas Partners, L.P., a Cayman Islands exempted limited partnership, invests substantially all of its assets in Reservoir Capital Master Fund, L.P. through its 100% ownership of RCMF, Ltd. The limited partners in Reservoir Capital Overseas Partners, L.P. are primarily individual, family and institutional investors. Reservoir Capital Group, L.L.C. is the general partner of Reservoir Capital Master Fund, L.P. and Reservoir Capital Overseas Partners, L.P., and is responsible for all management and investment decisions of Reservoir Capital Master Fund, L.P. Reservoir Capital Master Fund, L.P. generally invests side-by-side with Reservoir Capital Partners, L.P.

#### III. DESCRIPTION OF THE TRANSACTION

As noted above, the Transaction will proceed in two near-simultaneous steps in which the 50 percent interests in Sithe held each by Exelon SHC and RCSE will be transferred to Dynegy, resulting in Dynegy owning a 100 percent interest in Sithe.

<u>Step 1 – Call Transaction</u>. Exelon NEPM will acquire RCSE's entire 50 percent interest in ExRes by closing the call of the ExRes shares pursuant to the call option granted under the Put/Call Agreement.

<u>Step 2 – Sithe Transaction</u>. Exelon NEPM and Exelon SHC will each transfer their interests in ExRes pursuant to the Stock Purchase Agreement. <sup>7</sup>

<sup>&</sup>lt;sup>6</sup> Reservoir Capital Group, L.L.C. also has certain non-managing members.

<sup>&</sup>lt;sup>7</sup> As noted above, at Exelon NEPM's option, it also may cause RCSE to transfer its interests in Sithe directly to Dynegy.

Following the completion of Step 2, Sithe will be wholly-owned by Dynegy by virtue of Dynegy's 100 percent ownership of ExRes. The final post-Transaction organizational structure showing the upstream ownership of Sithe is shown in Exhibit A.

Applicants note that, although the Transaction would result in Sithe becoming an indirect wholly-owned subsidiary of Dynegy, the Stock Purchase Agreement obligates Exelon SHC to take financial responsibility for certain Sithe operations after Sithe is acquired by Dynegy. Specifically, Exelon SHC will be responsible for funding any cash shortfalls in connection with the on-going operation of certain Sithe generating units held by the MRA Companies,<sup>8</sup> in the event Dynegy notifies Exelon SHC of its intent not to accept financial responsibility for any or all of those units within the first 180 days following close of the Transaction (the "MRA Notice"). Pursuant to Section 5.16 of the Stock Purchase Agreement, however, Sithe will continue to own and operate the MRA Companies in the ordinary course of business (including bidding and scheduling of the plant(s)), at Exelon SHC's expense, after the effective date of the MRA Notice. This arrangement will remain in place until such time as Exelon SHC completes the divestiture, decommissioning, restructuring, bankruptcy, or other action with respect to the relevant MRA Company, as contemplated by the Stock Purchase Agreement.<sup>9</sup>

In addition, the Call Transaction will be consummated even in the unlikely event that the Sithe Transfer is not consummated. RCSE is not a party to the Stock Purchase Agreement and the transfer of RCSE's interests in ExRes to Exelon NEPM is not conditioned upon consummation of the Sithe Transfer. Therefore, the Petitioners request that the Commission

<sup>&</sup>lt;sup>8</sup> The MRA Companies subject to the Commission's jurisdiction are AG-Energy and Power City.

<sup>&</sup>lt;sup>9</sup> Any future divestiture of an MRA Company at Exelon SHC's direction would be the subject of a future filing at the Commission.

declare that it will not review or regulate under Sections 70 and 83 of the PSL the Call Transaction independently, even if the Sithe transfer is not consummated.

# **IV. DISCUSSION**

The Commission first articulated its policy on the regulatory regime of competitive wholesale providers of electricity in its *Wallkill Order*.<sup>10</sup> In the *Wallkill Order*, the Commission found that it could modify the regulatory oversight that was intended to apply to monopoly utilities when the oversight applied to generators operating in a competitive environment. With respect to Section 70 of the PSL, which requires, among other things, the Commission's approval before an electric corporation can transfer its stock, the Commission stated in the *Wallkill Order* that "it will be presumed that Section 70 regulation does not adhere to transfer of ownership interests in entities upstream from the parents of the New York competitive electric generation subsidiary, unless there is a potential for harm to the interests of captive utility ratepayers sufficient to override the presumption."<sup>11</sup>

The Commission reaffirmed the "Wallkill presumption" in orders providing for lightened regulation for many jurisdictional companies owning wholesale generating facilities in New York. In these orders, the Commission interpreted the Wallkill presumption to mean that no Section 70 regulation would adhere to any upstream transfer of ownership interests unless a potential for the exercise of market power sufficient to override the presumption would arise as a result of the transfer. In recent orders concerning the transfer of upstream ownership interests in wholesale generators, the Commission ruled that no Section 70 review was required because the

<sup>&</sup>lt;sup>10</sup> Case 91-E-0350, *Wallkill Generating Co., L.P.*, Order Establishing Regulatory Regime (April 11, 1994).

<sup>&</sup>lt;sup>11</sup> Id.

transferees did not have the potential to exercise market power in New York as a result of the transfer.<sup>12</sup> The Commission has found that the Wallkill presumption under Section 70 is equally applicable to upstream transfers of ownership in lightly-regulated steam plant under Section 83 of the Public Service Law.<sup>13</sup>

The Transaction will not have any adverse effect on competition and in fact will be competition neutral in the relevant market<sup>14</sup> because it will not result in any meaningful change in market shares or concentration levels. As discussed below and demonstrated in the accompanying affidavit of Dr. William H. Hieronymus, of the economic and management consulting firm of Charles River Associates, neither the Call Transaction nor the Sithe Transfer will result in any meaningful change in market shares or concentration levels in the NYISO market or otherwise have an adverse effect on competition.

Dr. Hieronymus first considers whether the Sithe Transfer would raise any horizontal market power concerns by performing a delivered price test for the NYISO market. Dr. Hieronymus finds that NYISO would be the only relevant geographic market given that it is the only market in which both Dynegy and Sithe own generation. Dynegy owns roughly 4 percent, and Sithe owns roughly 3 percent, of the 38,000 MW of generation in the NYISO market, which is largely unconcentrated. Dr. Hieronymus concludes that the combination of these market

<sup>&</sup>lt;sup>12</sup> Case 02-E-1184, *Sithe Energies, Inc. and Apollo Energy, LLC.*, Declaratory Ruling on Review of Stock Transaction (March 26, 2002); Case 01-E-1680, *Reliant Resources et al.*, Declaratory Ruling on Review of Stock Transfer, (December 20, 2001); Case 00-E-2017, *GPU International, Inc. and MEP Investments, LLC*, Declaratory Ruling on Review of Stock Transfer (January 4, 2001); Case 00-E-1585, *Sithe Energies, Inc., Exelon (Fossil) Holdings, Inc. and PECO Energy Company*, Order on Review of Stock Transfer and Other Transactions (November 16, 2000).

<sup>&</sup>lt;sup>13</sup> Case 02-M-1443, *Re Sithe Independence Power Partners, L.P.*, Order Providing for Lightened and Incidental Regulation and Granting a Certificate of Public Convenience and Necessity (January 23, 2003).

<sup>&</sup>lt;sup>14</sup> All the generating facilities at issue in this Application are located in New York.

shares would result in only a marginal change in concentration, well below any threshold level for concern.

Specifically, Dr. Hieronymus finds that the impact of the Sithe Transfer on competition in energy markets (Economic Capacity and Available Economic Capacity) and capacity markets (Installed Capacity) is minimal -i.e., the competitive analysis screen is passed by a wide margin. Taking into account the fact that Dynegy already has operational control over a large portion of Sithe's assets in New York,<sup>15</sup> the change in concentration resulting from the Sithe Transfer is below 20 HHI in the Economic Capacity market. Because measuring Available Economic Capacity in the NYISO market, which has implemented retail access, is impractical, Dr. Hieronymus used as a proxy for Available Economic Capacity the Uncommitted Capacity market share analysis now relied upon by FERC in reviewing of market-based rate applications. Even using very conservative assumptions, Dr. Hieronymus finds the combined Dynegy/Sithe uncommitted capacity would be less than 20 percent of the market and that the change in HHI for such uncommitted capacity would be less than 100 points. Dr. Hieronymus similarly finds that the impact of the Sithe Transfer on the ICAP/UCAP markets would be small and that the transfer would have no impact on ancillary services markets, particularly in light of the location of the Dynegy and Sithe generation and NYISO market monitor's conclusion that "[a]ncillary services markets are generally not tight because offers to supply typically exceed approximate demand." Hieronymus Affidavit at 11 (quoting NYISO State of the Market Report 2003 at 75).

<sup>&</sup>lt;sup>15</sup> Sithe's Independence generating facility is subject to a long-term tolling agreement with Dynegy, which has the right to 515 MW to 645 MW of the plant's capacity, depending on the season. Even were Applicants to assume that Sithe currently controlled 100 percent of the Independence capacity, Dr. Hieronymus finds that the change in HHI associated with Dynegy's acquisition of Sithe would increase by no more than 23 points.

Based on these combined findings, Dr. Hieronymus concludes that the Sithe Transfer is not likely to have an anti-competitive effect in any relevant market.

Dr. Hieronymus also considered the effect of the Transaction on an "Upstate New York" market that excludes New York City and Long Island, and concludes the changes in concentration still fall well within the limits of competitive analysis screen even under this narrower market definition. Both the NYISO market and Upstate New York markets are mostly unconcentrated and the small changes in concentration levels as a result of the Transaction demonstrate that the transaction is unlikely to have anti-competitive effects. Dr. Hieronymus also analyzed the Installed Capacity ("ICAP") or Unforced Capacity ("UCAP") market and conclude that Petitioners' share of it is small. Finally, Dr. Hieronymus considers the ancillary services markets in the Upstate New York market and demonstrates that the Transaction raises no market power concerns, particularly given that the New York assets being acquired are located on the unconstrained side of the Central-East interface. Only one of the Sithe units is capable of providing operating reserves, and its capability is small relative to the aggregate supply in the Upstate New York market.

Dr. Hieronymus concludes that there is no opportunity for Dynegy to have an enhanced position to exercise vertical market power as a result of the Sithe Transfer. None of the Petitioners own transmission assets other than those necessary to connect their generation to the grid. With regards to potential barriers to entry, Dr. Hieronymus finds that neither the Petitioners nor their affiliates control critical sites for new capacity development in relevant markets. The Northeast market for the development of merchant plants has been robust, and the substantial new entry of additional generation in these markets demonstrates the absence of entry barriers. Dr. Hieronymus also notes that neither the Petitioners nor their affiliates control fuel inputs to

11

generators, nor control any equipment suppliers or facilities used to transport fuels or other inputs to generation in relevant markets.

Finally, Dr. Hieronymus considers whether the Call Transaction, if consummated independently of the Sithe Transaction, would have an adverse effect on competition. The Call Transaction would result in Exclon SHC indirectly owning 100 percent of Sithe assuming that the Sithe Transaction did not take place. Dr. Hieronymus explains that regardless of whether the Sithe generation is under the control of Exclon or Dynegy following the Transaction (that is, whether only Step 1 has occurred, or both steps of the Transaction have occurred), his conclusion would be the same; namely, that the Transaction raises no market power concerns. Dr. Hieronymus' analysis is based in part on his recent triennial market power study filed with FERC on behalf of Exclon and Sithe,<sup>10</sup> and also on the fact that his prior analyses, filed with FERC, of transactions involving Exclon and Sithe have treated Exclon as controlling 100 percent of Sithe and there were no competitive concerns.<sup>17</sup> As he points out, Exclon owns no other affiliated generation or contracts in NYISO other than its share of Sithe's New York assets, and he previously has demonstrated that Exclon's affiliated share of the NYISO market pre-Acquisition is *de minimis*.<sup>18</sup> Dr. Hieronymus concludes, for all these reasons, that there is no

<sup>&</sup>lt;sup>16</sup> Exelon and its affiliates' September 27, 2004 compliance filing in connection with market-based rates (Docket No. ER99-754-008 *et al.*); and Sithe and its affiliates September 27, 2004 compliance filing in connection with market-based rates (Docket No. ER98-2782 *et al.*).

<sup>&</sup>lt;sup>17</sup> Docket No. EC03-122 (*Sithe Energies, et al.*, 105 FERC ¶ 61, 090 (2003)); Docket EC02-83 (*Sithe Energies, et al.*, 100 FERC ¶ 62,197 (2002)). His analysis in the EC02-83 docket (regarding Exelon's acquisition of Sithe's assets in New England) assumed that Exelon was acquiring Sithe's share of Independence.

<sup>&</sup>lt;sup>18</sup> In FERC Docket EC02-83 (*Sithe Energies, et al.*, 100 FERC ¶ 62,197 (2002)). Also, his workpapers in the FERC docket for the current Transaction confirm that Exelon's share of the NYISO market is *de minimis*.

need for further analysis to demonstrate that the Call Transaction also raises no market power concerns.<sup>19</sup>

Accordingly, because Dynegy does not have the potential to exercise market power in New York and cannot cause any harm to New York ratepayers as a result of the Transaction, and the Call Transaction by itself would not have an adverse effect on competition in New York and cannot cause any harm to New York ratepayers, the Wallkill presumption should apply and the Commission should issue a Declaratory Ruling that it will not review or regulate either Step 1 or Step 2 of the Transaction under Sections 70 and 83 of the PSL.

# V. CONCLUSION

On the verified facts presented and precedent cited herein, the presumption against the applicability of Sections 70 and 83 regulation to upstream transfers of ownership interest in competitive wholesale generators applies to each step of this Transaction. Petitioners respectfully request that the Commission expeditiously issue a Declaratory Ruling confirming that such presumption shall apply to both the Call Transaction and the Sithe Transaction, individually or together.

Respectfully submitted,

David B. Johnson

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<sup>&</sup>lt;sup>19</sup> See Affidavit of Dr. Hieronymus at p. 12.

Murphy (re) Kent D. Murphy

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Dated: November 3, 2004 Albany, New York

In the Matter of Sithe Energies, Inc., Dynegy New York Holdings, Inc., Exelon SHC, Inc., Exelon New England Power Marketing, L.P., RCSE, LLC and ExRes SHC, Inc. Joint Petition for a Declaratory Ruling Regarding the Application of Sections 70 and 83 of the Public Service Law.

Case 04-E-

# **VERIFICATION**

I, Craig Huff, President of RCSE, LLC in the above entitled proceeding, have read the foregoing petition and know the contents thereof and that the same is true and accurate as pertains to RCSE, LLC to the best of my knowledge, information and belief.

Craig Huff

Sworn to before me this \_/ day of November, 2004

ANNE COLUCCI NOTARY PUBLIC, STATE OF NEW YORK NO. OICO6085008 QUALIFIED IN QUEENS COUNTY COMMISSION EXPIRES DECEMBER 16, <u>C</u> MALL Colucie

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Case 04-E-

#### VERIFICATION

I, Todd D. Cutler, Assistant Secretary of Exelon SHC, Inc., Assistant Secretary of ExRES SHC, and Assistant Secretary of Exelon AOG Holding #1, Inc., General Partner of Exelon New England Power Marketing, L.P., on behalf of Exelon New England Power Marketing, L.P., have read the foregoing petition and know the contents thereof and that the same is true and accurate to the best of my knowledge, information and belief.

Todd D. Cutler

Deane B. Faweren Votary Public Sworn to before me this

day of November , 2004



Member, Pennsylvania Association Of Notaries

In the Matter of Sithe Energies, Inc., Dynegy New York Holdings, Inc., Exelon SHC, Inc., Exelon New England Power Marketing, L.P., RCSE, LLC and ExRes SHC, Inc. Joint Petition for a Declaratory Ruling Regarding the Application of Sections 70 and 83 of the Public Service Law.

Case 04-E-

#### VERIFICATION

I, Hyun Park, Senior Vice President, General Counsel and Secretary, in the above entitled proceeding, have read the foregoing petition and know the contents thereof and that the same is true and accurate to the best of my knowledge, information and belief.

Y Hyun Park

Sworn to before me this 2nd day of November 2, 2004

At New York, New York.

Sau Notary Public

SARIT LEVY Notary Public, State of New York No. 01LE8062439 Qualified In Kings County Certificate Filed In New York County Commission Expires August 6, 20<u>25</u>

In the Matter of Sithe Energies, Inc., Dynegy New York Holdings, Inc., Exelon SHC, Inc., Exelon New England Power Marketing, L.P., RCSE, LLC and ExRes SHC, Inc. Joint Petition for a Declaratory Ruling Regarding the Application of Sections 70 and 83 of the Public Service Law.

Case 04-E-

# **VERIFICATION**

I, Terry D. Jones, Sr. Vice President of Dynegy New York Holdings, Inc., in the above entitled proceeding, have read the foregoing petition and know the contents thereof and state that the same are true and accurate, to the best of my knowledge, information and belief.

Sworn to before me this 2 <sup>nd</sup> day of November, 2004.	Terry D Jones
	Tacherine D. Dusker

Notary Public, State of Texas





Sithe Energies, Inc. Current Ownership Structure





Sithe Energies, Inc. Proposed Ownership Structure



\*The Parties currently contemplate that National Energy Development Inc. may be merged into Sithe Energies, Inc. prior to the proposed Transaction. If this merger occurs ExRes Power Holdings, Inc. would directly hold 100% of Sithe Energies, Inc.

# ORIGINAL

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#### NEW YORK STATE PUBLIC SERVICE COMMISSION

In the Matter of Sithe Energies, Inc., DynegyCase 04-E-New York Holdings Inc., Exelon SHC, Inc., ExelonNew England Power Marketing, L.P., RCSE, LLC andExRes SHC, Inc. Joint Petition for a DeclaratoryRuling Regarding the Application of Sections 70and 83 of the Public Service Law.

#### **AFFIDAVIT OF WILLIAM H. HIERONYMUS**

#### I. INTRODUCTION

My name is William H. Hieronymus. I am a Vice President at Charles River Associates Incorporated ("CRA"). My business address is 200 Clarendon Street, T-33, Boston, MA 02116. The primary focus of my consulting is in the areas of electric utility industry restructuring, regulatory innovation, privatization, and business strategy in the increasingly competitive U.S. electricity industry. In this context, I have testified before the Federal Energy Regulatory Commission ("FERC") and state commissions (including the New York Public Service Commission) on market power issues involving numerous electric utility mergers; Regional Transmission Organization ("RTO"), Independent System Operator ("ISO"), and power pool tariff filings; sale and purchase of jurisdictional assets; and market rate applications. My resume is attached as Exhibit I to this affidavit.

Sithe Energies, Inc. ("Sithe"); Dynegy New York Holdings Inc. ("Dynegy"); Exelon SHC, Inc. ("Exelon SHC"); Exelon New England Power Marketing, L.P. ("Exelon NEPM"); RCSE, LLC ("RCSE"); and ExRes SHC, Inc. ("ExRes") (together, the "Applicants") seek Commission approval of the New York Public Service Commission ("Commission") for Dynegy's acquisition (the "Transaction") of Sithe.<sup>1</sup> Sithe owns, through subsidiaries and affiliates, interests in five New York generating facilities (Independence, Batavia, Massena, Ogdensburg, and Sterling), collectively, the "New York Assets."<sup>2</sup>

I have been asked by counsel for Applicants to evaluate the potential competitive impact of the Transaction on the relevant electricity markets in accordance with procedures used by the Commission. My understanding is that the Commission's procedures are broadly similar to the Appendix A Competitive Analysis Screen used by the FERC to assess the competitive effect of merger. FERC's Order No. 592,<sup>3</sup> the "Merger Policy Statement," and Order No. 642,<sup>4</sup> provide a detailed analytic framework for assessing the market power arising from electric utility mergers. I have included a copy of the affidavit that I submitted to the FERC with respect to the Transaction as Exhibit 2, and summarize the relevant analyses and findings of the FERC Competitive Analysis Screen herein. I also include some additional analyses that may be of particular interest to the Commission in its consideration of the competitive implications of the Transaction.

## II. SUMMARY OF CONCLUSIONS

The Transaction will not have an adverse impact on competition in the relevant markets. The acquisition of the New York Assets will not cause a significant increase in the market concentration in the relevant product markets in New York. To the extent there are any horizontal issues, they relate to the combination of Sithe generation and Dynegy-affiliated generation located

<sup>&</sup>lt;sup>1</sup> As detailed in the Application, this represents the second step of a two-part transaction.

<sup>&</sup>lt;sup>2</sup> Sithe also owns four hydro generating facilities ("Allegheny Hydro") located in PJM ("PJM Assets").

<sup>&</sup>lt;sup>3</sup> FERC Order No. 592, FERC Stats and Regs. ¶ 31,044 (1996).

<sup>&</sup>lt;sup>4</sup> FERC Order No. 642, Final Rule in Docket No. RM98-4-000, 18 CFR Part 33, 93 FERC ¶ 61,164 (2000) ("Revised Filing Requirements").

in the control area of New York Independent System Operator ("NYISO"). Most other generation assets controlled by Dynegy affiliates are geographically remote from New York. The relevant geographic market in New York is large and generally unconcentrated. NYISO has within its control area some 38,000 MW of generation, of which Dynegy currently controls about 4 percent<sup>5</sup> and Sithe owns about 3 percent. Ignoring long-term sales commitments that may alter the party controlling the subject generation, the combination of these two market shares would result in a change in concentration of substantially less than 50 points, well below any possible threshold of concern, even if the market were not unconcentrated.

The Economic Capacity analysis I conducted using the FERC Competitive Analysis Screen demonstrates that the Transaction raises no competitive concerns in energy markets in the NYISO. I also considered the effect of the Transaction on an "Upstate New York" market that excludes New York City and Long Island, and conclude the changes in concentration still fall well within the limits of the screen even under this narrower market definition. Both the NYISO market and Upstate New York markets are mostly unconcentrated and the small changes in concentration levels as a result of the Transaction demonstrate that the transaction is unlikely to have anti-competitive effects. I also analyzed the Installed Capacity ("ICAP") or Unforced Capacity ("UCAP") market and conclude that Applicants' share is small. Finally, I considered the ancillary services inarkets in the NYISO and demonstrate that the Transaction raises no market power concerns, particularly given that the New York Assets being acquired are located on the unconstrained side of the Central-East interface and Dynegy's existing capacity is within the

<sup>&</sup>lt;sup>5</sup> This does not reflect Dynegy's control over a portion of Sithe's Independence plant subject to a tolling agreement, as discussed below.

constrained area. Only one of the Sithe units is capable of providing operating reserves, and its capability is small relative to capable supply in the NYISO.

There also is no opportunity for Dynegy to have an enhanced position to exercise vertical market power as a result of the Transaction. None of the Applicants own transmission assets in New York, other than those necessary to connect their generation to the grid. Any potential concerns about the creation of barriers to entry resulting from control over scarce resources or inputs into generation in the relevant markets (e.g., fuels delivery systems or generation sites) are not relevant to the Transaction.

I conclude, therefore, that there are no material market power issues arising from the Transaction, and recommend that the Commission conclude that the Transaction will not have an adverse effect on competition in markets subject to its jurisdiction.

# **III. DESCRIPTION OF RELEVANT ASSETS**

Dynegy, through affiliates, currently controls the Roseton (497 MW)<sup>6</sup> and Danskammer (1,206 MW) plants in New York, and has a long-term tolling agreement with Sithe for a portion (515 MW to 645 MW) of the output of the Independence plant (948 MW), under which Dynegy provides the fuel and has the right to 515 MW to 645 MW of energy, depending on the season.

Sithe currently has approximately 1,300 MW of generating capacity (summer rating) in operation in New York, consisting of five generating facilities:<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> Numbers reflect summer ratings.

<sup>&</sup>lt;sup>7</sup> Sithe also owns four small hydro facilities in PJM West (the former Allegheny Energy control area) totaling about 50 MW. The full output of these units is sold under long-term contracts, including 31 MW that is sold. to a customer in the NYISO. (The other customer is located in PJM.)

- Batavia, 55.8 MW
- Massena, 80.6 MW
- Ogdensburg, 76.3 MW
- Sterling, 55.1 MW
- Independence, 947.8 MW

Sithe has the rights to the output of the capacity of the Independence that is not subject to the tolling agreement with Dynegy, and Sithe also has the rights to the capacity credits available from Independence. Approximately 700 MW of capacity from the Independence plant is sold under long-term contract (until 2014) to Consolidated Edison to meet its ICAP/UCAP obligation.<sup>8</sup>

# IV. ANALYSIS

# A. Economic Capacity

In analyzing Economic Capacity, which is a measure of energy markets I took into consideration Dynegy's tolling agreement on the Sithe Independence plant in my pre-Transaction analysis as shown in the table below.

	Shares of Independence (without outages)						
	Pre-Acquisition			Post-Acquisition			
	Summer	Winter	Shoulder	Summer	Winter	Shoulder	
Dynegy	522.0	638.0	578.0	947.8	1081.9	947.8	
Sithe	425.8	443.9	369.8	0.0	0.0	0.0	
Total	947.8	1081.9	947.8	947.8	1081.9	947.8	

<sup>&</sup>lt;sup>8</sup> This contract is of sufficient duration (10 more years) that it clearly should be taken into account as a transfer of control from Sithe to Consolidated Edison. In the absence of barriers to entry, long-term markets are generally deemed to be competitive.

As shown in Exhibit 3, Dynegy's share of the NYISO market pre-Transaction is at most 6 percent, and Sithe's share is less than 2 percent. The Transaction results in a maximum HHI change of 17 points. The market is unconcentrated in all time periods.

I also conducted the equivalent analysis for the Upstate New York market, both with and without consideration of imports. As shown below, the post-Transaction market is unconcentrated when imports are considered, and moderately concentrated without imports. The Transaction results in a maximum HHI change of 28 with imports and 49 without imports, as shown in Exhibit 4 and Exhibit 5, respectively, well below the screen thresholds.

# B. ICAP/UCAP

The impact of this Transaction on relevant ICAP/UCAP markets is small, as reflected in the results for Economic Capacity test at a very high price (i.e., \$150/MWh) to approximate a UCAP market.<sup>9</sup> As noted above, the NYISO market is unconcentrated and the impact of the Transaction was small (post-Transaction market share of 6.3 percent and an HHI change resulting from the Transaction of only 13 points). (See Exhibit 3.) Moreover, as I also noted earlier, Sithe sells approximately 700 MW of capacity from the Independence plant to Consolidated Edison as UCAP under a long-term contract. With that taken into consideration, the impact of the Transaction on UCAP markets would be diluted significantly further.

I also evaluated the capacity market for Upstate New York, without consideration of imports,<sup>10</sup> and, as shown in Exhibit 6, concluded that the HHI changes associated with the

<sup>&</sup>lt;sup>9</sup> Since my analysis for summer reflects only forced outages, this Economic Capacity measure should be a reasonable proxy for UCAP.

<sup>&</sup>lt;sup>10</sup> In this analysis, I did not adjust for outages to reflect UCAP rather than ICAP. However, since the NYISO, in its calculations appears to apply the same forced outage rates to all generating units in calculating UCAP, market shares for ICAP and UCAP are equivalent.

Transaction were small in an unconcentrated market. Even combined, Dynegy and Sithe will control less than 10 percent of ICAP in the Upstate market, and will be only the fourth largest supplier (with New York Power Authority, NRG Power and Entergy Nuclear each larger than the combined Dynegy-Sithe).

It is also clear that the post-Transaction Dynegy is not a pivotal supplier of ICAP. As shown in Exhibit 7, against a forecast peak load of 32,060 MW in 2005, a control area capability of 40,722 MW and a required reserve margin of 18 percent, capacity in excess of requirements is 2,891 MW. Dynegy will control 2,220 MW of capacity, and hence is not pivotal to the supply of ICAP. (This is a conservative analysis since imports are not included as potential supply.) The circumstance is similar from the perspective of Upstate New York alone as well.

Finally, given that the NYISO, in 2003, implemented a "demand curve" for capacity that specifies the price of capacity given different levels of supply relative to the required reserve margin (18 percent ICAP, 11.9 percent UCAP), I evaluated whether the combined company has the theoretical ability to benefit from withholding in the ICAP market.

It should be noted that at low levels of ICAP payments (that is, at high levels of reserves), essentially all sellers will benefit from, or at least not be harmed by, withholding capacity. Because the price effect of reducing the amount of capacity available in the ICAP auction is linear, a large supplier withholding a given amount of capacity will have more remaining capacity that receives the higher price. As a result, a larger supplier has more of an incentive to withhold than a smaller supplier. Moreover, the price level at which withholding becomes unattractive is lower for small suppliers than for large suppliers. Hence, as a matter of mechanics, there will be a region of the ICAP demand curve in which Dynegy will theoretically have an incentive to withhold more after the acquisition than before it.

To examine the quantitative significance of this, I performed the following experiment. I simulated the profit maximizing amount of supply offered for Sithe and Dynegy separately and for the combined firm.<sup>11</sup> To test the impact at different reserve levels, I varied demand up and down.<sup>12</sup> The results are shown in the figure below.



**NYISO ICAP Price** 

At reserve margins in excess of 26.5 percent, a supplier the size of a pre-acquisition Dynegy operating alone would find it economic to withhold some supply if unconstrained by market rules if no other supplier was also withholding.<sup>13</sup> This result suggests that, absent some non-structural requirement to bid (i.e., NYISO rules against withholding and/or operation of the anti-market manipulation clause in sellers' market-based rate tariff), prices at the lowest part of the

<sup>&</sup>lt;sup>11</sup> I also assumed that each of Sithe and Dynegy knew the amount that the other was bidding into the market and that all other suppliers bid all of their capacity. Formally, this is a two-person Cournot game with all other players treated as fringe players. Imports and exports are assumed to be zero.

<sup>&</sup>lt;sup>12</sup> This is equivalent to holding demand constant and varying non-applicants' supply up and down, except that 100 MW of demand change is equivalent to 118 MW of supply change.

<sup>&</sup>lt;sup>13</sup> Of course, this assumption is unlikely to hold true because other similarly-sized generators would have similar incentives.

demand curve would not occur because a generator (or generators) would withhold capacity before prices could fall to that level. To achieve the profit-maximizing price, however, a generator the size of Dynegy would have to withhold a significant block of its capacity, in this case 530 MW – over 31 percent of Dynegy's total pre-acquisition capacity. This would be quite visible to the market monitor.

In this lower part of the demand curve, the additional withholding made economic by the acquisition raises the theoretical price by small amounts, 33 cents or less. Since this occurs only at reserve margins that are far above the 18 percent ICAP reserve deemed optimal, a more important question is whether the transaction causes a generator such as Dynegy to profit from withholding at significantly lower reserve margins than before the transaction. The answer is that it does not. The point at which a generator such as Dynegy ceases to profit at all from withholding is at NYISO peak demand levels only 300 MW higher than before the transaction. To put this in context, this 300 MW swing (from 32,200 MW to 32,500 MW) is less than half of a year's demand growth for the state.

In the real world, the effect of the transaction would be much smaller than these calculations show, if indeed there would be any effect at all. First, contrary to the assumption in my analysis, suppliers do not have unfettered freedom to withhold capacity from the ICAP market. Second, even the theoretical effect is small, at most \$0.33 per kW-month, and even this effect occurs only if reserve margins are quite high. The reserve margin at which withholding is profitable substantially exceeds the target reserve level at which entry becomes fully profitable, a condition that should not occur often.

Third, the analysis that I have performed ignores the potential effects of withholding by sellers other than Dynegy or Sithe. My analysis assumes, counter-factually, that there is no

regulatory constraint on withholding. Under such circumstances, other sellers would have an incentive to increase prices; this would reduce any theoretical incentive for a generator such as Dynegy to withhold, with or without the transaction. In particular, I note that my analysis does not take imports and exports into account. The "swing" between imports and exports as sellers in New York and in PJM and ISO-NE arbitrage between markets will be very elastic. The analysis that I have performed indicates that only modest amounts of additional or reduced supply as a result of inter-RTO trading will have significant effects on prices. Unless the degree of excess capacity varies significantly among the RTOs, inter-RTO trading should be sufficient to equilibrate prices in the three Northeastern pools. Had I taken this inter-pool arbitrage into account, the effect on prices for a given amount of withholding would have been far less since the relevant market would be several times the size of NYISO.<sup>14</sup>

Finally, I note that in the long term, withholding, even if not disciplined by market rules, would not affect the price of ICAP in New York. As Steven Stoft, a witness for ISO-NE in FERC Docket No. ER03-563-30, demonstrates, the long run effect of changing the level or shape of the demand curve (as withholding at high reserve levels would do) will affect the expected profitability of new entrants. The more favorable probability distribution of ICAP payments in my analysis would induce more entry. The end result is a higher level of reserves and reliability than would be expected absent withholding. However, the expected ICAP price will still only equal the costs that the entrant must recover; otherwise still more entry would occur. Since the entrant earns more under conditions of substantial excess supply, it does not need the extra profits earned when

<sup>&</sup>lt;sup>14</sup> If withholding one MW of capacity raises the price by \$.00125 per kW-month in New York, the increase would be only about \$0.00025 for a joint market. This makes withholding far less profitable. To make the point another way, shifting the NYISO import-export balance by 2,000 MW would move the NYISO ICAP price by \$2.50-kW-month. Inter-pool arbitrage would both dwarf the effect of withholding by any seller and neutralize any effect of such withholding, since the theoretically higher price withholding would cause would bring in more imports or reduce exports.

reserves are below 18 percent to the degree that otherwise would be required, so that the system will yield the same average ICAP price but at a slightly higher level of reliability.

# C. Ancillary Services

In reaching my conclusion that the Transaction does not raise any market power concerns with respect to ancillary services, I rely in part on analyses conducted by the NYISO and its market monitor, which concluded that "Ancillary services markets are generally not tight because offers to supply typically exceed approximate demand."<sup>15</sup> The market monitor found that offers for 30-minute reserves typically exceed demand by 230 percent; offers for ten-minute reserves (east of the Central-East interface) typically exceed demand by 160 percent; and offers for regulation and 10-minute spinning reserves typically exceed demand by 100-170 percent.<sup>16</sup> Non-spinning reserves remain subject to a mandatory offer requirement.

The Dynegy units (Roseton and Danskammer), located on the eastern side of the Central-East interface, account for only 6-11 percent of the capability for 10-minute spin (in Eastern New York) and about 3-5 percent of 30-minute reserves (in all of New York).<sup>17</sup> The Sithe units are not uniquely positioned to provide these ancillary services and, indeed, are located outside of the Eastern New York region in which 1,000 MW of the NYISO's 1,200 MW of required ten-minute reserves must be purchased. Of the Sithe units, only Ogdensburg is currently capable of providing spinning or operating reserves, and its capability represents less than one percent of NYISO's total

<sup>&</sup>lt;sup>15</sup> New York ISO State of the Market Report 2003, p. 75.

<sup>&</sup>lt;sup>16</sup> *Ibid*.

<sup>&</sup>lt;sup>17</sup> The range in shares for the Dynegy plants represents the differences in capability depending on the plant's load level.

capability for 30-minute reserves.<sup>18</sup> See Exhibit 8. Clearly, there is no concern about the combination of these units insofar as the effect on ancillary services.

None of the Sithe units are capable of providing regulation, and hence the Transaction has no effect on the supply of regulation.

# D. Other Relevant Issues

I also note that, with respect to the New York Assets (other than Independence), Exelon SHC will continue to have the obligation to fund any cash shortfalls in the event Dynegy notifies Exelon SHC of its intent not to accept financial responsibility for any or all of those units within approximately six months following the Transaction. Under this circumstance, Sithe will continue to own and operate the facilities. This obligation has no effect on my analysis or conclusions: in the absence of the Transaction, I would have included the Sithe assets as part of the generation portfolio affiliated with Exelon as, indeed, I have in prior analyses submitted to the FERC.<sup>19</sup> Thus, regardless of whether these Sithe assets should be considered under the control of Exelon or Dynegy post-Transaction, my conclusion would be the same, namely that the Transaction raises no market power concerns.

I also considered whether there would be any competitive impact on relevant markets if only the first step of this two-step transaction occurs, namely if Exelon SHC acquires all of RCSE's interests in ExRes pursuant to its call option (as described in the Application). The first

<sup>&</sup>lt;sup>18</sup> The New York ISO State of the Market Report 2003 (p. 75) reports total capability for 30-minute reserves of about 11,000 MW. The report also provides information on capability to provide 10-minute spin, 10-minute non-spin and regulation, but only on the eastern side of the Central-East interface. Since the Sithe generation is located on the western side of that interface, I cannot estimate its share of these ancillary services, but I note that even if I were to calculate their share of eastern NYISO capability, it is quite small.

<sup>&</sup>lt;sup>19</sup> Docket No. EC03-122 (Sithe Energies, et al., 105 FERC ¶ 61, 090 (2003)); Docket EC02-83 (Sithe Energies, et al., 100 FERC ¶ 62,197 (2002)); Docket No. ER99-754-008 et al. as part of Exelon and its affiliates' September
step of the transaction would result in Exelon owning all of ExRes and, hence, indirectly owning all of Sithe. Whether I treat the Sithe generation as under the control of Exelon or Dynegy following the transaction (that is, whether only the first step has occurred, or both steps of the transaction have occurred), my conclusion would be the same, namely that the transaction raises no market power concerns, in either the NYISO or PJM. I base this in part on my recent triennial market power study filed at FERC on behalf of Exelon and Sithe,<sup>20</sup> but also on the fact that my prior analyses filed at FERC of transactions involving Exelon and Sithe have treated Exelon as controlling 100 percent of Sithe.<sup>21</sup> Exelon owns no other affiliated generation or contracts in NYISO other than its share of Sithe's New York Assets, and I previously have demonstrated that Exelon's affiliated share of the NYISO market pre-Acquisition is *de minimis*.<sup>22</sup> Therefore, for all these reasons, there is no need for further analysis to demonstrate that the first step of the transaction also raises no market power concerns.

## V. CONCLUSION

On the basis of the analyses discussed herein and in my affidavit filed at FERC, I conclude that no significant competitive problems are present and that the Transaction should be approved.

<sup>27, 2004</sup> compliance filing in connection with market-based rates; and Docket No. ER98-2782 *et al.* as part of Sithe and its affiliates' September 27, 2004 compliance filing in connection with market-based rates.

<sup>&</sup>lt;sup>20</sup> Exelon and its affiliates' September 27, 2004 compliance filing in connection with market-based rates (Docket No. ER99-754-008 *et al.*); and Sithe and its affiliates September 27, 2004 compliance filing in connection with market-based rates (Docket No. ER98-2782 *et al.*).

<sup>&</sup>lt;sup>21</sup> Docket No. EC03-122 (Sithe Energies, et al., 105 FERC ¶ 61, 090 (2003)); Docket EC02-83 (Sithe Energies, et al., 100 FERC ¶ 62,197 (2002)). Indeed, my analysis in the EC02-83 docket (regarding Exelon's acquisition of Sithe's assets in New England) assumed that Exelon was acquiring Sithe's share of Independence. These transactions raised no competitive concerns

<sup>&</sup>lt;sup>22</sup> Docket EC02-83 (*Sithe Energies, et al.*, 100 FERC ¶ 62,197 (2002)). Also, my workpapers in the FERC docket for the current Transaction confirm that Exelon's share of the NYISO market is *de minimis*.

Millian H. Hieronymus William H. Hieronymus

# WILLIAM H. HIERONYMUS — Vice President

Ph.D.	Economics, University of Michigan
M.A.	Economics, University of Michigan
B.A.	Social Science, University of Iowa

William Hieronymus has consulted extensively to managements of electricity and gas companies, their counsel, regulators, and policymakers. His principal areas of concentration are the structure and regulation of network utilities and associated management, policy, and regulatory issues. Dr. Hieronymus has spent the last fourteen years working on the restructuring and privatization of utility systems in the U.S. and internationally. In this context he has assisted the managements of energy companies on corporate and regulatory strategy, particularly relating to asset acquisition and divestiture. He has testified extensively on regulatory policy issues and on market power issues related to mergers and acquisitions. In his twenty-five years of consulting to this sector, he also has performed a number of more specific functional tasks, including analyzing potential investments; assisting in negotiation of power contracts, tariff formation, demand forecasting, and fuels market forecasting. Dr. Hieronymus has testified frequently on behalf of energy sector clients before regulatory bodies, federal courts, and legislative bodies in the United States and United Kingdom. He has contributed to numerous projects, including the following:

# **ELECTRICITY SECTOR STRUCTURE, REGULATION, AND RELATED MANAGEMENT AND PLANNING ISSUES**

## **U.S. Market Restructuring Assignments**

- Dr. Hieronymus serves as an advisor to the senior executives of electric utilities on restructuring and related regulatory issues, and he has worked with senior management in developing strategies for shaping and adapting to the emerging competitive market in electricity. Related to some of these assignments, he has testified before state agencies on regulatory policies and on contract and asset valuation.
- For utilities seeking merger approval, Dr. Hieronymus has prepared and testified to market power analyses at FERC and before state commissions. He also has assisted in discussions with the Antitrust Division of the Department of Justice and in responding to information requests. The mergers on which Dr. Hieronymus has testified include both electricity mergers and combination mergers involving electricity and gas companies. Among the major mergers on which he has testified are Sempra (Enova and Pacific Enterprises), Xcel (New Century Energy and Northern States Power),

#### WILLIAM H. HIERONYMUS — Page 2

Exelon (Commonwealth Edison and Philadelphia Electric), AEP (American Electric Power and Central and Southwest), Dynegy-Illinois Power, Con Edison-Orange and Rockland, Dominion-Consolidated Natural Gas, NiSource-Columbia Energy, E-on-PowerGen/LG&E and NYSEG-RG&E. He also submitted testimony in mergers that were terminated for unrelated reasons, including Entergy-Florida Power and Light and Consolidated Edison-Northeast Utilities. Testimony on similar topics has been filed for a number of smaller utility mergers and for asset acquisitions. Dr Hieronymus has also assisted numerous clients in the pre-merger screening of potential acquisitions and merger partners.

- For utilities seeking to establish or extend market rate authority, Dr. Hieronymus has provided numerous analyses concerning market power in support of submissions under Sections 205 of the Federal Power Act.
- For utilities and power pools engaged in restructuring activities, he has assisted in examining various facets of proposed reforms. Such analysis has included features of the proposals affecting market efficiency and those that have potential consequences for market power. Where relevant, the analysis also has examined the effects of alternative reforms on the client's financial performance and achievement of other objectives.
- For generators and marketers, Dr. Hieronymus has testified extensively in the regulatory proceedings concerning the electricity crisis in the WECC that occurred during May 2000 and May 2001. His testimony concerned, *inter alia*, the economics of long term contracts entered into during that period the behavior of market participants during the crisis period and the nexus between purportedly dysfunctional spot markets and forward contracts.
- For the New England Power Pool (NEPOOL), Dr. Hieronymus examined the issue of market power in connection with NEPOOL's movement to market-based pricing for energy, capacity, and ancillary services. He also assisted the New England utilities in preparing their market power mitigation proposal. The main results of his analysis were incorporated in NEPOOL's market power filing before FERC and in ISO-New England's market power mitigation rules.
- For a coalition of independent generators, he provided affidavits advising FERC on changes to the rules under which the northeastern U.S. power pools operate.
- As part of a large planning and analysis team, Dr. Hieronymus assisted a Midwest utility in developing an innovative proposal for electricity industry restructuring.
- Dr. Hieronymus has contributed substantially to projects dealing with the restructuring of the California electricity industry. In this context he also is a witness in California and FERC proceedings on the subject of market power and mitigation and more recently before FERC in connection with transactions related to PG&E's bankruptcy and on the contracts signed between merchant generators and various buyers.

## WILLIAM H. HIERONYMUS — Page 3

#### Valuation of Utility Assets in North America

- Dr. Hieronymus has testified in state securitization and stranded cost quantification proceedings, primarily in forecasting the level of market prices that should be used in assessing the future revenues and the operating contribution earned by the owner of utility assets in energy and capacity markets. The market price analyses are tailored to the specific features of the market in which a utility will operate and reflect transmission-constrained trading over a wide geographic area. He also has testified in rebuttal to other parties' testimony concerning stranded costs, and has assisted companies in internal stranded cost and asset valuation studies.
- He was the primary valuation witness on behalf of a western utility in an arbitration proceeding concerning the value of a combined cycle plant coming off lease that the utility wished to purchase.
- He assisted a bidder in determining the commercial terms of plant purchase offers as well as assisting clients in assessing the regulatory feasibility of potential acquisitions and mergers.

#### Other U.S. Utility Engagements

- Dr. Hieronymus has contributed to the development of several benchmarking analyses for U.S. utilities. These have been used in work with clients to develop regulatory proposals, set cost reduction targets, restructure internal operations, and assess merger savings.
- Dr. Hieronymus was a co-developer of a market simulation package tailored to regionspecific applications. He and other senior personnel have conducted numerous multiday training sessions using the package to help utility clients in educating management regarding the consequences of wholesale and retail deregulation and in developing the skills necessary to succeed in this environment.
- He has made numerous presentations to U.S. utility managements regarding overseas electricity systems.
- For an East Coast electricity holding company, Dr. Hieronymus prepared and testified to an analysis of the logic and implementation issues concerning utility-sponsored conservation and demand-management programs as alternatives to new plant construction.
- In connection with nuclear generating plants nearing completion, he has testified in Pennsylvania, Louisiana, Arizona, Illinois, Missouri, New York, Texas, Arkansas, New Mexico, and before the Federal Energy Regulatory Commission regarding plant-inservice rate cases on the issues of equitable and economically efficient treatment of plant costs for tariff-setting purposes, regulatory treatment of new plants in other jurisdictions, the prudence of past system planning decisions and assumptions, performance incentives, and the life-cycle costs and benefits of the units. In these and other utility regulatory proceedings, Dr. Hieronymus and his colleagues have provided

#### WILLIAM H. HIERONYMUS - Page 4

extensive support to counsel, including preparation of interrogatories, crossexamination support, and assistance in writing briefs.

- On behalf of utilities in the states of Michigan, Massachusetts, New York, Maine, Indiana, Pennsylvania, New Hampshire, and Illinois, he has submitted testimony in regulatory proceedings on the economics of completing nuclear generating plants that were then under construction. His testimony has covered the likely cost of plant completion; forecasts of operating performance; and extensive analyses of the impacts of completion, deferral, and cancellation upon ratepayers and shareholders. For the senior managements and boards of utilities engaged in nuclear plant construction, Dr. Hieronymus has performed a number of highly confidential assignments to support strategic decisions concerning the continuance of construction.
- For an eastern Pennsylvania utility that suffered a nuclear plant shutdown due to NRC sanctions relating to plant management, he filed testimony regarding the extent to which replacement power cost exceeded the costs that would have occurred but for the shutdown.
- For a major Midwestern utility, Dr. Hieronymus headed a team that assisted senior management in devising its strategic plans, including examination of such issues as plant refurbishment/life extension strategies, impacts of increased competition, and available diversification opportunities.
- On behalf of two West Coast utilities, Dr. Hieronymus testified in a needs certification hearing for a major coal-fired generation complex concerning the economics of the facility relative to competing sources of power, particularly unconventional sources and demand reductions.
- For a large western combination utility, he participated in a major 18-month effort to provide the client with an integrated planning and rate case management system.
- For two Midwestern utilities, Dr. Hieronymus prepared an analysis of intervenorproposed modifications to the utilities' resource plans. He then testified on their behalf before a legislative committee.

#### **U.K.** Assignments

• Following promulgation of the white paper that established the general framework for privatization of the electricity industry in the United Kingdom, Dr. Hieronymus participated extensively in the task forces charged with developing the new market system and regulatory regime. His work on behalf of the Electricity Council and the twelve regional distribution and retail supply companies focused on the proposed regulatory regime, including the price cap and regulatory formulas, and distribution and transmission use of system tariffs. He was an active participant in industry-government task forces charged with creating the legislation, regulatory framework, initial contracts, and rules of the pooling and settlements system. He also assisted the regional

## WILLIAM H. HIERONYMUS — Page 5

companies in the valuation of initial contract offers from the generators, including supporting their successful refusal to contract for the proposed nuclear power plants that subsequently were canceled as being non-commercial.

- During the preparation for privatization, Dr. Hieronymus assisted several individual U.K. electricity companies in understanding the evolving system, in developing use of system tariffs, and in enhancing commercial capabilities in power purchasing and contracting. He continued to advise a number of clients, including regional companies, power developers, large industrial customers, and financial institutions on the U.K. power system for a number of years after privatization.
- Dr. Hieronymus assisted four of the regional electricity companies in negotiating equity ownership positions and developing the power purchase contracts for a 1,825 megawatt combined cycle gas station. He also assisted clients in evaluating other potential generating investments including cogeneration and non-conventional resources.
- Dr. Hieronymus also has consulted on the separate reorganization and privatization of the Scottish electricity sector. Part of his role in that privatization included advising the larger of the two Scottish companies and, through it, the Secretary of State on all phases of the restructuring and privatization, including the drafting of regulations, asset valuation, and company strategy.
- He assisted one of the Regional Electricity Companies in England and Wales in the 1993 through 1995 regulatory proceedings that reset the price caps for its retailing and distribution businesses. Included in this assignment was consideration of such policy issues as incentives for the economic purchasing of power, the scope of price control, and the use of comparisons among companies as a basis for price regulation. Dr. Hieronymus's model for determining network refurbishment needs was used by the regulator in determining revenue allowances for capital investments.
- He assisted one of the Regional Electricity Companies in its defense against a hostile takeover, including preparation of its submission to the Cabinet Minister who had the responsibility for determining whether the merger should be referred to the competition authority.

#### Assignments Outside the U.S. and U.K.

- Dr. Hieronymus assisted a large state-owned European electricity company in evaluating the impacts of the 1997 EU directive on electricity that *inter alia* requires retail access and competitive markets for generation. The assignment included advice on the organizational solution to elements of the directive requiring a separate transmission system operator and the business need to create a competitive marketing function.
- For the European Bank for Reconstruction and Development, he performed analyses of least-cost power options and evaluated the return on a major investment that the Bank was considering for a partially completed nuclear plant in Slovakia. Part of this

#### WILLIAM H. HIERONYMUS -- Page 6

assignment involved developing a forecast of electricity prices, both in Eastern Europe and for potential exports to the West.

- For the OECD he performed a study of energy subsidies worldwide and the impact of subsidy elimination on the environment, particularly on greenhouse gases.
- For the Magyar Villamos Muvek Troszt, the electricity company of Hungary, Dr. Hieronymus developed a contract framework to link the operations of the different entities of an electricity sector in the process of moving from a centralized commandand-control system to a decentralized, corporatized system.
- For Iberdrola, the largest investor-owned Spanish electricity company, he assisted in development of their proposal for a fundamental reorganization of the electricity sector, its means of compensating generation and distribution companies, its regulation, and the phasing out of subsidies. He also has assisted the company in evaluating generation expansion options and in valuing offers for imported power.
- Dr. Hieronymus contributed extensively to a project for the Ukrainian Electricity Ministry, the goal of which was to reorganize the Ukrainian electricity sector and prepare it for transfer to the private sector and the attraction of foreign capital. The proposed reorganization is based on regional electric power companies, linked by a unified central market, with market-based prices for electricity.
- At the request of the Ministry of Power of the USSR, Dr. Hieronymus participated in the creation of a seminar on electricity restructuring and privatization. The seminar was given for 200 invited Ministerial staff and senior managers for the USSR power system. His specific role was to introduce the requirements and methods of privatization. Subsequent to the breakup of the Soviet Union, Dr. Hieronymus continued to advise both the Russian energy and power ministry and the government-owned generation and transmission company on restructuring and market development issues.
- On behalf of a large continental electricity company, Dr. Hieronymus analyzed the proposed directives from the European Commission on gas and electricity transit (open access regimes) and on the internal market for electricity. The purpose of this assignment was to forecast likely developments in the structure and regulation of the electricity sector in the common market and to assist the client in understanding their implications.
- For the electric utility company of the Republic of Ireland, he assessed the likely economic benefit of building an interconnector between Eire and Wales for the sharing of reserves and the interchange of power.
- For a task force representing the Treasury, electricity generating, and electricity distribution industries in New Zealand, Dr. Hieronymus undertook an analysis of industry structure and regulatory alternatives for achieving the economically efficient generation of electricity. The analysis explored how the industry likely would operate under alternative regimes and their implications for asset valuation, electricity pricing, competition, and regulatory requirements.

## WILLIAM H. HIERONYMUS — Page 7

## TARIFF DESIGN METHODOLOGIES AND POLICY ISSUES

- Dr. Hieronymus participated in a series of studies for the National Grid Company of the United Kingdom and for ScottishPower on appropriate pricing methodologies for transmission, including incentives for efficient investment and location decisions.
- For a U.S. utility client, he directed an analysis of time-differentiated costs based on accounting concepts. The study required selection of rating periods and allocation of costs to time periods and within time periods to rate classes.
- For EPRI, Dr. Hieronymus directed a study that examined the effects of time-of-day rates on the level and pattern of residential electricity consumption.
- For the EPRI-NARUC Rate Design Study, he developed a methodology for designing optimum cost-tracking block rate structures.
- On behalf of a group of cogenerators, Dr. Hieronymus filed testimony before the Energy Select Committee of the UK Parliament on the effects of prices on cogeneration development.
- For the Edison Electric Institute (EEI), he prepared a statement of the industry's position on proposed federal guidelines regarding fuel adjustment clauses. He also assisted EEI in responding to the U.S. Department of Energy (DOE) guidelines on cost-of-service standards.
- For private utility clients, Dr. Hieronymus assisted in the preparation both of their comments on draft FERC regulations and of their compliance plans for PURPA Section 133.
- For a state utilities commission, Dr. Hieronymus assessed its utilities' existing automatic adjustment clauses to determine their compliance with PURPA and recommended modifications.
- For DOE, he developed an analysis of automatic adjustment clauses currently employed by electric utilities. The focus of this analysis was on efficiency incentive effects.
- For the commissioners of a public utility commission, Dr. Hieronymus assisted in preparation of briefing papers, lines of questioning, and proposed findings of fact in a generic rate design proceeding.

# SALES FORECASTING METHODOLOGIES FOR GAS AND ELECTRIC UTILITIES

• For the White House Sub-Cabinet Task Force on the future of the electric utility industry, Dr. Hieronymus co-directed a major analysis of "least-cost planning studies" and "low-growth energy futures." That analysis was the sole demand-side study commissioned by the task force, and it formed a basis for the task force's conclusions

#### WILLIAM H. HIERONYMUS — Page 8

concerning the need for new facilities and the relative roles of new construction and customer side-of-the-meter programs in utility planning.

- For a large eastern utility, Dr. Hieronymus developed a load forecasting model designed to interface with the utility's revenue forecasting system-planning functions. The model forecasts detailed monthly sales and seasonal peaks for a 10-year period.
- For DOE, he directed development of an independent needs assessment model for use by state public utility commissions. This major study developed the capabilities required for independent forecasting by state commissions and provided a forecasting model for their interim use.
- For state regulatory commissions, Dr. Hieronymus has consulted in the development of service area-level forecasting models of electric utility companies.
- For EPRI, he authored a study of electricity demand and load forecasting models. The study surveyed state-of-the-art models of electricity demand and subjected the most promising models to empirical testing to determine their potential for use in long-term forecasting.
- For a Midwestern electric utility, he provided consulting assistance in improving the client's load forecast, and testified in defense of the revised forecasting models.
- For an East Coast gas utility, Dr. Hieronymus testified with respect to sales forecasts and provided consulting assistance in improving the models used to forecast residential and commercial sales.

# OTHER STUDIES PERTAINING TO REGULATED AND ENERGY COMPANIES

In a number of antitrust and regulatory matters, Dr. Hieronymus has performed • analyses and litigation support tasks. These cases have included Sherman Act Section 1 and 2 allegations, contract negotiations, generic rate hearings, ITC hearings, and a major asset valuation suit. In a major antitrust case, he testified with respect to the demand for business telecommunications services and the impact of various practices on demand and on the market share of a new entrant. For a major electrical equipment vendor, Dr. Hieronymus testified on damages with respect to alleged defects and associated fraud and warranty claims. In connection with mergers for which he is the market power expert, Dr. Hieronymus assists clients in Hart-Scott-Rodino investigations by the Antitrust Division of the U.S. Department of Justice and the Federal Trade Commission. In an arbitration case, he testified as to changed circumstances affecting the equitable nature of a contract. In a municipalization case, he testified concerning the reasonable expectation period for the supplier of power and transmission services to a municipality. In two Surface Transportation Board proceedings, he testified on the sufficiency of product market competition to inhibit the exercise of market power by railroads transporting coal to power plants.

## WILLIAM H. HIERONYMUS - Page 9

- For a landholder, Dr. Hieronymus examined the feasibility and value of an energy conversion project that sought a long-term lease. The analysis was used in preparing contract negotiation strategies.
- For an industrial client considering development and marketing of a total energy system for cogeneration of electricity and low-grade heat, Dr. Hieronymus developed an estimate of the potential market for the system by geographic area.
- For the U.S. Environmental Protection Agency (EPA), he was the principal investigator in a series of studies that forecasted future supply availability and production costs for various grades of steam and metallurgical coal to be consumed in process heat and utility uses.

Dr. Hieronymus has been an invited speaker at numerous conferences on such issues as market power, industry restructuring, utility pricing in competitive markets, international developments in utility structure and regulation, risk analysis for regulated investments, price squeezes, rate design, forecasting customer response to innovative rates, intervener strategies in utility regulatory proceedings, utility deregulation, and utility-related opportunities for investment bankers.

Prior to rejoining CRA in June 2001, Dr. Hieronymus was a Member of the Management Group at PA Consulting, which acquired Hagler Bailly, Inc. in October 2000. He was a Senior Vice President of Hagler Bailly. In 1998, Hagler Bailly acquired Dr. Hieronymus's former employer, Putnam, Hayes & Bartlett, Inc. He was a Managing Director at PHB. He joined PHB in 1978. From 1973 to 1978 he was a Senior Research Associate at CRA. Previously, he served as a project director at Systems Technology Corporation and as an economist while serving as a Captain in the U.S. Army.

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

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Sithe Energies, Inc., Dynegy New York Holdings Inc., Exelon SHC, Inc., Exelon New England Power Marketing, L.P., RCSE, LLC, ExRes SHC, Inc., AG-Energy, L.P., Power City Partners, L.P., Seneca Power Partners, L.P., Sterling Power Partners, L.P., Sithe/Independence Power Partners, L.P., and Sithe Energy Marketing, L.P.

Docket No. EC05-\_\_\_\_-000

#### **AFFIDAVIT OF WILLIAM H. HIERONYMUS**

#### I. INTRODUCTION

My name is William H. Hieronymus. I am a Vice President at Charles River Associates Incorporated ("CRA"). My business address is 200 Clarendon Street, T-33, Boston, MA 02116. The primary focus of my consulting is in the areas of electric utility industry restructuring, regulatory innovation, privatization, and business strategy in the increasingly competitive U.S. electricity industry. In this context, I have testified before the Federal Energy Regulatory Commission ("FERC" or "Commission") and state commissions on market power issues involving numerous electric utility mergers; Regional Transmission Organization ("RTO"), Independent System Operator ("ISO"), and power pool tariff filings; sale and purchase of jurisdictional assets; and market rate applications. My resume is attached as Exhibit DYN-101.

I have been asked by counsel for Sithe Energies, Inc. ("Sithe"); Dynegy New York Holdings Inc. ("Dynegy"); Exelon SHC, Inc. ("Exelon SHC"); Exelon New England Power Marketing, L.P. ("Exelon NEPM"); RCSE, LLC ("RCSE"); ExRes SHC, Inc. ("ExRes"); ExRes SHC, Inc. ("ExRes"); AG-Energy, L.P.; Power City Partners, L.P.; Seneca Power Partners, L.P.; Sterling Power Partners, L.P.; Sithe/Independence Power Partners, L.P.; and Sithe Energy

#### Exhibit DYN-100

Marketing, L.P. (together, the "Applicants") to evaluate the potential competitive impact of the transaction described below on the relevant electricity markets.<sup>1</sup> The Applicants seek Commission approval under Section 203 of the Federal Power Act ("FPA") for Dynegy's acquisition of Sithe (the "Transaction").<sup>2</sup> Sithe owns, through subsidiaries and affiliates, interests in five New York generating facilities (Independence, Batavia, Massena, Ogdensburg, and Sterling), collectively, the "New York Assets." Sithe also owns four hydro generating facilities ("Allegheny Hydro") located in PJM ("PJM Assets").

## II. SUMMARY OF CONCLUSIONS

The Transaction will not have an adverse impact on competition in the relevant markets.

The acquisition of the New York Assets will not cause a significant increase in the market concentration in the relevant product markets in New York. To the extent there are any horizontal issues, they relate to the combination of Sithe generation and Dynegy-affiliated generation located in the control area of New York Independent System Operator ("NYISO"). Most other generation assets controlled by Dynegy affiliates are geographically remote from New York. The relevant geographic market in New York is large and generally unconcentrated. NYISO has within its

<sup>&</sup>lt;sup>1</sup> I filed affidavits in connection with several transactions relating to Sithe: Exelon Generation, LLC's acquisition of a 49.9 percent share of Sithe in Docket No. EC00-138 (*Sithe Energies, et al.*, 93 FERC ¶ 61,244 (2000)); Exelon Generation's acquisition of Sithe Energies' New England assets in 2002 in Docket EC02-83 (*Sithe Energies, et al.*, 100 FERC ¶ 62,197 (2002)); and a transaction that resulted in Sithe becoming an indirect subsidiary owned 50% each by an affiliate of Exelon and RCSE, LLC in Docket No. EC03-122 (*Sithe Energies, et al.*, 105 FERC ¶ 61, 090 (2003)). The assets involved in the 2003 transaction consisted primarily of the New York Assets at issue here.

In addition to filings in these dockets, I also have filed various affidavits and testimony in connection with marketbased rate applications, triennial updates, and transactions on behalf of Dynegy, Sithe and Exelon for which the assets that are the subject of this Transaction were part of my analyses.

<sup>&</sup>lt;sup>2</sup> As detailed in the Application, and as discussed below, this represents the second step of a two-part transaction.

control area some 38,000 MW of generation, of which Dynegy currently controls about 4 percent<sup>3</sup> and Sithe owns about 3 percent. Ignoring long-term sales commitments that may alter the party controlling the subject generation, the combination of these two market shares would result in a change in concentration of substantially less than 50 points, well below any possible threshold of concern, even if the market were not unconcentrated.

In fact, however, the change in concentration is far less than calculated from this combination of ownership shares. A Dynegy affiliate already has operational control over a large portion of the Sithe New York Assets, through a long term tolling agreement on Sithe's Independence plant. The tolling agreement gives Dynegy control over 522 MW of the 948 MW summer rating of the plant.<sup>4</sup> In prior analyses that I conducted on behalf of Dynegy's affiliates and filed with the Commission in connection with a number of proceedings, I consistently and appropriately counted this portion of Sithe Independence as under the control of Dynegy's affiliates.<sup>5</sup> Taking this transfer of control into consideration, the change in concentration is below 20 points.

I also have considered whether Dynegy's acquisition of Sithe's Allegheny Hydro facilities raise any market power concerns and concluded that it does not. The output of the Allegheny Hydro facilities, approximately 50 MW located in the PJM control area, is committed under long-

<sup>&</sup>lt;sup>3</sup> This does not reflect Dynegy's control over a portion of Sithe's Independence plant subject to a tolling agreement, as discussed below.

<sup>&</sup>lt;sup>4</sup> The tolling amounts vary by season, averaging 579 MW over the year, 522 MW summer, 638 MW winter, and 578 MW shoulder.

<sup>&</sup>lt;sup>5</sup> See, for example, Docket No. EC03-122 (Sithe Energies, et al., 105 FERC ¶ 61, 090 (2003)); Docket EC02-83 (Sithe Energies, et al., 100 FERC ¶ 62,197 (2002)); and AmerGen Energy Company, LLC, et al. in Docket No. ER99-754-008 et al. (Exelon and its affiliates September 27, 2004 compliance filing in connection with market-based rates).

term contract. While the Allegheny Hydro facilities remain under Sithe's operational control, their capacity represents a *de minimis* share of PJM's capacity. PJM's current footprint includes about 150,000 MW of generation. Dynegy and its affiliates own or control approximately 2,000 MW of capacity within the PJM footprint, or only about one percent. The combination of Sithe with Dynegy in PJM is, by any measure, *de minimis*. Further, if I consider that Sithe's affiliate, Exelon Generation (also an affiliate of Applicants Exelon SHC and Exelon NEPM), owns or controls in excess of 25,000 MW in the PJM control area, the sale of the 50 MW of Sithe generation in PJM from a relatively larger market participant (Sithe-Exelon) to a relatively smaller market participant (Dynegy) is deconcentrating in the PJM market. On the basis of these facts, the Transaction does not raise any horizontal market power issues in generation in PJM, and, consequently, there is no need for a full horizontal Competitive Analysis Screen in that market.

For purposes of my analyses, I have evaluated the effects of the Transaction in the NYISO market using the delivered price test specified in the Commission's Order No. 642, treating the Transaction as a merger. My analysis addresses the NYISO market as the only relevant geographic market.<sup>6</sup> I find that the impact of the Transaction on competition in energy markets (Economic Capacity) and capacity markets (Installed Capacity) is minimal; that is, the Competitive Analysis Screen is passed by a wide margin. The NYISO market is unconcentrated and the small changes in concentration levels as a result of the Transaction demonstrate that the transaction is unlikely to have anti-competitive effects in any relevant market. The Competitive Analysis Screen

<sup>&</sup>lt;sup>6</sup> As I discuss below, an analysis of the NYISO market is sufficient to demonstrate that the effect of this Acquisition on competition is not material. I also considered whether there could be a materially different result when transmission constraints may create submarkets within the larger NYISO market, and concluded that there could not. While Dynegy's current capacity (Roseton and Danskammer) is located east of the Central-East interface, the Sithe units are west of the Central-East interface.

also is passed for Available Economic Capacity.<sup>7</sup> Applicants' share of the Installed Capacity ("ICAP") or Unforced Capacity ("UCAP") is small. There is no concern about the impact on ancillary services markets, particularly given that the New York Assets being acquired are located on the unconstrained side of the Central-East interface. The NYISO market monitor has concluded that "Ancillary services markets are generally not tight because offers to supply typically exceed approximate demand."<sup>8</sup> Only one of the Sithe units is capable of providing operating reserves, and its capability is small relative to capable supply in the NYISO. Moreover, the NYISO has in place Commission-approved market monitoring and mitigation safeguards.

There also is no opportunity for Dynegy to have an enhanced position to exercise vertical market power as a result of the Transaction. None of the Applicants own transmission assets other than those necessary to connect their generation to the grid. (An affiliate of the seller owns transmission assets in PJM, but this is not relevant to my inquiry and, in any event, such assets are under the independent control and operation of the PJM RTO.) Any potential concerns about the creation of barriers to entry resulting from control over scarce resources or inputs into generation in the relevant markets (e.g., fuels delivery systems or generation sites) are not relevant to the Transaction.

<sup>&</sup>lt;sup>1</sup> It is difficult to conduct a typical analysis of Available Economic Capacity given that New York has retail access, and it is quite difficult to match load and resources to determine that portion of generation and load that is not "committed." For that reason, Available Economic Capacity is not a particularly meaningful measure. Nevertheless, I conducted a very conservative analysis of Available Economic Capacity that follows the parameters of the Commission's current market share screen for market-based rates. This analysis demonstrates that the change in concentration is well within the threshold levels for the Competitive Analysis Screen.

<sup>&</sup>lt;sup>8</sup> New York ISO State of the Market Report 2003, page 75.

I conclude, therefore, that there are no material market power issues arising from the Transaction, and recommend that the Commission conclude that the Transaction will not have an adverse effect on competition in markets subject to its jurisdiction.

## III. DESCRIPTION OF APPLICANTS AND TRANSACTION

#### A. Dynegy

Dynegy Inc. produces and delivers energy, including natural gas, power, natural gas liquids and coal, through its owned and contractually controlled network of physical assets. Dynegy Inc. also serves customers by aggregating production and supply and delivering value-added solutions to meet their energy needs.

Its key energy affiliates include Dynegy Power Corp., an independent power producer with interests in power generating facilities throughout much of the United States. These include the Roseton (497 MW) and Danskammer (1,206 MW) plants in New York, and approximately 2,000 MW of generation owned or controlled in PJM (in the former control areas of AEP and Commonwealth Edison). A Dynegy affiliate also has a tolling agreement for an additional 550 MW of generation in PJM. See Exhibit DYN-102. The remainder of Dynegy's generation is located outside of the Northeast and PJM.

Dynegy Midwest Generation, Inc. owns the fossil-fueled generation formerly owned by Illinois Power Company. Dynegy recently closed on the sale of Illinois Power Company to

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#### Exhibit DYN-100

Ameren Corporation (see Docket No. EC04-81).<sup>9</sup> Dynegy Power Marketing, Inc. is a power marketer.

Other principal Dynegy energy affiliates include: Dynegy Energy Services, Inc., a competitive retail gas and electricity provider; Dynegy Marketing and Trade, a holder of a blanket certificate to sell natural gas at wholesale that also acquires natural gas for the power plants owned by other Dynegy affiliates and manages commodity price risk associated with its operations; Dynegy Midstream Services, Ltd. Partnership, which engages in natural gas gathering, processing, fractionation and transportation, and storage and marketing of natural gas liquids; and Dynegy Coal Trading & Transportation, L.L.C., which arranges fuel supply for Dynegy's coal-fired generation facilities.

## **B.** Sithe and Affiliates

Sithe's principal business is in the development and operation of non-utility generation facilities. As described more fully in the Application, Sithe is currently owned 50 percent by Exelon Generation and 50 percent by Reservoir Capital.

Sithe currently has approximately 1,300 MW of generating capacity (summer rating) in operation in New York, plus approximately 50 MW in PJM, as shown in Exhibit DYN-102.<sup>10</sup> Sithe's generation in New York consists of five generating facilities (numbers reflect summer ratings):

<sup>&</sup>lt;sup>9</sup> Ameren Corporation *et al.*, 108 FERC ¶ 61,094 (2004).

<sup>&</sup>lt;sup>10</sup> In 2002, Sithe sold its generation assets in New England to Exelon Generation Docket EC02-83 (Sithe Energies, et al., 100 FERC ¶ 62,197 (2002)).

- Batavia, 55.8 MW
- Massena, 80.6 MW
- Ogdensburg, 76.3 MW
- Sterling, 55.1 MW
- Independence, 947.8 MW

The Independence plant is subject to a long-term tolling agreement with Dynegy, under which Dynegy provides the fuel and has the right to 515 MW to 645 MW of energy, depending on the season. Sithe has the output of the remainder of the capacity. The question of which party has "operational control" is complicated. Dynegy clearly has the right to dispatch the plant under its tolling agreement with Sithe. Sithe controls maintenance scheduling in consultation with Dynegy; Sithe implements any required forced outages. Sithe also has the rights to the capacity credits available from Independence, and sells approximately 700 MW of capacity from the Independence plant to Consolidated Edison as UCAP under a long-term agreement.

Sithe also owns four small hydro facilities in PJM West (the former Allegheny Energy control area) totaling about 50 MW. The full output of these units is sold under long-term contracts; Sithe continues to operate the facilities. The output of two of the facilities (18 MW) is sold to a customer in PJM West, while the output of the other two facilities (31 MW) is sold to a customer in the NYISO.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> While I did not include the output of these facilities as part of Sithe's portfolio, the MWs are so small that the effect on my results is immaterial.

#### IV. HORIZONTAL MARKET POWER

Market power is the ability of a firm profitably to maintain prices above competitive levels for a significant period of time. For purposes of my analyses, I treated Dynegy's acquisition of Sithe as if it were a merger. Market power analysis of a merger proposal examines whether the merger would cause a material increase in the merging firms' market power or a significant reduction in the competitiveness of relevant markets. The focus is on the effects of the merger, which means that the merger analysis examines those business areas in which the merging firms are competitors. This is referred to as "horizontal market power assessment." In most instances, a merger will not affect competition in markets in which the merging firms do not compete.

In December 1996, the Commission issued Order No. 592,<sup>12</sup> the "Merger Policy Statement," which provides a detailed analytic framework for assessing the horizontal market power arising from electric utility inergers. This analytic framework is organized around a market concentration analysis. The Commission adopted the DOJ/FTC *Horizontal Merger Guidelines* for measuring market concentration levels by the Herfindahl-Hirschman Index ("HHI").<sup>13</sup> On November 15, 2000, the Commission issued its Revised Filing Requirements Under Part 33 of the

<sup>&</sup>lt;sup>12</sup> Order No. 592, FERC Stats and Regs. ¶ 31,044 (1996).

<sup>&</sup>lt;sup>13</sup> To determine whether a proposed merger will have a significant anti-competitive impact, the DOJ and FTC consider the level of the HHI after the merger (the post-merger HHI) and the change in the HHI that results from the combination of the market shares of the merging entities. Markets with a post-merger HHI of less than 1000 are considered "unconcentrated." The DOJ and FTC generally consider mergers in such markets to have no anti-competitive impact. Markets with post-merger HHIs of 1000 to 1800 are considered "moderately concentrated." In those markets, mergers that result in an HHI change of 100 points or fewer are considered unlikely to have anti-competitive effects. Finally, post-merger HHIs of more than 1800 are considered to indicate "highly concentrated" markets. The *Guidelines* suggest that in these markets, mergers that increase the HHI by 50 points or fewer are unlikely to have a significant anti-competitive impact, while mergers that increase the HHI by more than 100 points are considered likely to reduce market competitiveness. (See U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, 1992 [amended 1997].)

#### Exhibit DYN-100

Commission's Regulations,<sup>14</sup> which affirmed the screening approach to mergers consistent with the Appendix A analysis set forth in the Merger Policy Statement, and codified the need to file a screen analysis and the exceptions therefrom.

Appendix A of the Merger Policy Statement (the "Competitive Analysis Screen") specifies a "delivered price" screening test to measure Economic Capacity, defined as energy that can be delivered into a destination market at a delivered cost less than 105 percent of the destination market price. The screening test also provides for an analysis of Available Economic Capacity, defined as energy over and above that required to meet native load and other long-term obligations that meets the delivered price test.<sup>15</sup>

If a proposed merger raises no market power concerns (i.e., passes the Appendix A screen), the inquiry generally is terminated. Both the Merger Policy Statement and the Revised Filing Requirements accept that merger applications involving no overlap in relevant geographic markets do not require a screen analysis or filing of the data needed for the screen analysis.<sup>16</sup>

<sup>&</sup>lt;sup>14</sup> Order No. 642, Final Rule in Docket No. RM98-4-000, 18 CFR Part 33, 93 FERC ¶ 61,164 (2000) ("Revised Filing Requirements").

<sup>&</sup>lt;sup>15</sup> An analysis of Available Economic Capacity is more difficult in retail access states such as New York because it requires assumptions about the retention of load and provider-of-last-resort obligations.

<sup>&</sup>lt;sup>16</sup> Order No. 592 (at 30,113) states: "...it will not be necessary for the merger applicants to perform the screen analysis or file the data needed for the screen analysis in cases where the merging firms do not have facilities or sell relevant products in common geographic markets. In these cases, the proposed merger will not have an adverse competitive impact (i.e., there can be no increase in the applicants' market power unless they are selling relevant products in the same geographic markets) so there is no need for a detailed data analysis."

The Revised Filing Requirements state that an analysis need not be filed if the applicant "demonstrates that the merging entities do not currently conduct business in the same geographic markets or that the extent of the business transactions in the same geographic markets is *de minimis*."

## Exhibit DYN-100

## A. Relevant Products

The Commission historically has been concerned with three relevant product markets: non-firm energy, short-term capacity (firm energy), and long-term capacity.<sup>17</sup> Both Economic Capacity and Available Economic Capacity are used as measures of energy. The Commission's current policy does not require analyses of capacity markets as such, likely because competitive conditions in the energy market in peak periods closely correlate with conditions in capacity markets. Under the Economic Capacity and Available Economic Capacity measures, capacity that is attributed to a market participant is that capacity that can reach the destination market, taking transmission constraints and costs into account, at a price no higher than 105 percent of the destination market price. As described above, the two measures differ as to the treatment of capacity used to meet native load requirements. While not specifically required by the Commission's guidelines, I examined capacity relevant for the Installed Capacity ("ICAP") and Unforced Capacity ("UCAP") market in New York.

The Commission also considers some ancillary services as relevant product markets and requires that applicants assess the effects of the transaction on such markets to the extent that data necessary for such analysis are available. These include spinning and non-spinning reserves and imbalance energy.<sup>18</sup>

<sup>&</sup>lt;sup>17</sup> The market for long-term capacity generally does not need to be analyzed since the Commission has concluded as a generic matter that the potential for entry ensures that the long-term capacity market is competitive See *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Statutes and Regulations, ¶ 31,036 - 31,657 (1996). The presumption that long-term capacity markets are competitive can be overcome if the applicants have dominant control over power plant sites or fuels supplies and delivery systems. This exception is addressed below.

<sup>&</sup>lt;sup>18</sup> See Revised Filing Requirements §33.3(c)(1).

#### Exhibit DYN-100

#### **B.** Relevant Geographic Markets

Traditionally, the Commission has defined the relevant geographic markets as centered on the utilities directly interconnected with the applicants, referred to as "first-tier" utilities. Both Order No. 592 and the Revised Filing Requirements continue to define the relevant geographic market in terms of first-tier destination markets.<sup>19</sup> Further, in a merger context, the Commission considers as potential additional destination markets other utilities that historically have been customers of the applicants.

The Commission also has accepted an approach whereby customers that have the same supply alternatives can be aggregated into a single destination market. This approach has been accepted in a number of merger filings in New York, PJM, and New England, and is directly relevant in the instant Application.<sup>20</sup>

The potential geographic overlap arising from this Transaction is between the generation owned by Sithe in New York and the generation controlled by Dynegy in New York.<sup>21</sup> Although Sithe's PJM generation is also part of this Transaction, the extent of business transactions between Sithe's 50 MW of PJM generation and Dynegy's generation in New York is *de mininis*: all of the output of Sithe's Allegheny Hydro facilities is sold under a long-term contract to an unaffiliated

<sup>&</sup>lt;sup>19</sup> Order No. 592 at 30,119.

Revised Filing Requirements, ¶ 31,311 at 31,844-5, citing Atlantic City Electric Company and Delmarva Power & Light Company, 80 FERC ¶ 61,126 (1997); Consolidated Edison Co., Inc. and Northeast Utilities 91 FERC ¶ 61,225 (2000). To the extent there are internal transmission constraints within these markets, the Commission has considered smaller markets within these single control areas as potentially relevant.

<sup>&</sup>lt;sup>21</sup> Other generation owned by their affiliates in first-tier markets also is included in the analysis as potentially importable into New York.

## Exhibit DYN-100

parties, one for delivery in PJM and the other for delivery in the NYISO.<sup>22</sup> Therefore, the only relevant geographic market to consider in detail is the NYISO.

When important transmission interfaces within individual ISO control areas are not constrained, the supply alternatives to every purchaser within an ISO will be the same. When important transmission system interfaces are constrained, internal price separation can occur within NYISO, which uses location-based marginal pricing, and these constrained interfaces act to define smaller relevant geographic markets. Power flows in the NYISO are principally from the north and west to the southeast. The Total-East interface within NYISO is the primary interface through which power moves into the eastern half of New York State. This interface constitutes a transmission constraint that can cause marginal production costs to differ, sometimes substantially, between the downstate and upstate portions of the state, thus creating separate markets within NYISO. The other corridor through which power moves into eastern New York is through the interface between NYISO and ISO New England. The East of Total East market within the NYISO is defined as that portion of NYISO on the eastern (constrained) side of the Total-East transmission interface and related transmission limitations.<sup>23</sup> In the context of this Transaction, there are no submarkets of relevance: while Dynegy's Danskammer and Roseton plants are located in the Eastern (sometimes constrained) portion of NYISO, Sithe's New York Assets are

<sup>&</sup>lt;sup>22</sup> Further, because Sithe's affiliate, Exelon Generation (also an affiliate of Applicants Exelon SHC and Exelon NEPM), owns or controls in excess of 25,000 MW in the PJM control area, the sale of the 50 MW of Sithe generation in PJM from a relatively larger market participant (Sithe-Exelon) to a relatively smaller market participant (Dynegy) deconcentrates the PJM market.

<sup>&</sup>lt;sup>23</sup> A NYISO-West market is sometimes analyzed, although this market likely has no meaning independent of the total NYISO market since transmission out of New York City and westward across Total East is never constrained. New York City also is considered a separate submarket.

#### Exhibit DYN-100

located on the western side of the constrained interface. Thus, there is no need to further consider submarkets within the NYISO.

I have not considered in detail any markets outside of NYISO, since the overlap in the ownership of generation (including any portion of generation that could be delivered into that market) would by definition reflect a lesser competitive impact. If the Transaction does not have a material effect on market concentration in the markets I have analyzed, it will not in others. On this basis, I concluded that the filing of a full horizontal analysis covering these other markets, including PJM, is not required under the Commission's regulations.

## V. MODELING AND DATA INPUTS

The Appendix A competitive screening methodology considers physical transmission constraints in determining the potential supply available to a destination market. I have implemented the Appendix A analysis using a proprietary CRA model called the "Competitive Analysis Screening Model" ("CASm").<sup>24</sup> CASm is a linear programming model developed specifically to perform the calculations required in undertaking the delivered price test. The model includes each potential supplier as a distinct "node" or area that is connected via a transportation (or "pipes") representation of the transmission network. Each link in the network has its own non-simultaneous limit and cost. Potential suppliers are allowed to use all economically and physically feasible links or paths to reach the destination market. In instances where more generation meets the economic facet of the delivered price test than actually can be delivered on the transmission network, scarce transmission capacity is allocated based on the relative amount of economic

<sup>&</sup>lt;sup>24</sup> A technical description of CASm is included in my workpapers.

## Exhibit DYN-100

generation that each party controls at a constrained interface. The model incorporates simultaneous transmission import capability based on a common limiting element approach consistent with the Commission's approach outlined in *FirstEnergy*.<sup>25</sup>

I conducted the Appendix A competitive screening test assuming the existing market structure and using publicly available data on generation (from the EIA-411 reports or their equivalent) and transmission capacity (from OASIS postings and other public sources). The data inputs were adjusted to reflect 2005 conditions as a representative year (e.g., to reflect updated fuel prices, load, and generation).

Much of the description that follows relates to my general modeling assumptions and data inputs. I also provide relevant descriptions where modeling assumptions and data inputs are specific to the NYISO.

#### A. Generating Resources

The main source for data on generating plant capability is from the EIA-411 publications dated April 2004 (the most current data available), supplemented by earlier editions as necessary. For New York, I relied primarily on the *2004 Load and Capacity Data*, report of the NYISO.<sup>26</sup> These reports provide data on summer and winter capacity, planned retirements and additions, and jointly-owned units. For jointly-owned plants, shares were assigned to each of the respective

<sup>&</sup>lt;sup>25</sup> Ohio Edison Company, et al., 80 FERC ¶ 61,039 (1997).

<sup>&</sup>lt;sup>26</sup> Sithe provided me an updated winter rating for its Independence plant (1,081.9 MW) that was slightly higher than the NYISO report (1,072.5). I used the higher rating.

#### Exhibit DYN-100

owners. Summer ratings were used for the summer and shoulder periods and winter ratings for the winter period. The data reflect retirements and capacity additions as of January 1, 2004.

Each supplier's generating resources were adjusted to reflect long-term capacity purchase and sales, where such data were available.<sup>27</sup> Purchases and sales (of one year or more duration) were identified from publicly available information, such as FERC Form 1 and EIA Form 412 filings (or databases based on these forms), Form EIA-411, individual utility resource plans, and NERC's Electricity Supply and Demand ("ES&D") database. For purposes of my analysis, I limited the scope of potential supply into the NYISO to generation located within the NYISO plus imports from New England, PJM, Hydro Quebec and Ontario. While more remote generation (e.g., generation in markets interconnected with ISO-NE and PJM) could compete in the NYISO as well, I conservatively excluded such generation.

To the extent a utility has sold energy rights under a long-term agreement, ownership and/or over that resource was assumed to pass to the buyer.<sup>28,29</sup> Accordingly, generation ownership was adjusted to reflect the transfer of control by assuming that the sale resulted in a decrease in capacity for the seller and a corresponding increase in capacity for the buyer. Consistent with guidance provided in Appendix A, it was assumed that system power sales were comprised of the lowest-cost supply for the seller unless a more representative price could be

<sup>&</sup>lt;sup>27</sup> Requirements contracts are treated as the equivalent of native load, and Economic Capacity was not adjusted to reflect them.

<sup>&</sup>lt;sup>28</sup> Consistent with this assumption, NUGs were assumed to be under the control of the purchasing utility.

<sup>&</sup>lt;sup>29</sup> The Revised Filing Requirements direct applicants to consider whether operational control of a unit is transferred to the buyer. Such information generally is not readily available for non-applicants. Therefore, I treated long-term sales as being under the control of the purchaser if no information on operational control was available.

identified.<sup>30</sup> To the extent that long-term sales could be identified specifically as unit sales, the capacity of the specific generating unit was adjusted to reflect the sale, and the variable element of the purchase price attributed to the sale was the variable cost of the unit. The dispatch price for system purchases was based on the energy price reported for long-term purchases in FERC Form 1 where such purchases could be identified and a variable cost price determined.<sup>31</sup>

Since the delivered price test is intended to evaluate energy products, the capacity (in MW) reported in Form EIA-411 was de-rated to approximate the actual availability of the units in each period. That is, it was assumed that generation capacity would be unavailable during some hours of the year for either (planned) maintenance or forced (unplanned) outages. Data reported in the NERC "Generating Availability Data System" ("GADS") was used to calculate the "average equivalent availability factor" to estimate total outages, and the "average equivalent forced outage rate" to estimate forced outages for fossil and nuclear plants.<sup>32</sup> Scheduled maintenance was assumed to occur only during the non-peak (shoulder) seasons and forced outages were assumed to occur uniformly throughout the year.

Supply curves were developed for each potential supplier in the model, based on estimates of each unit's incremental costs. The incremental cost is calculated by multiplying the fuel cost for

<sup>&</sup>lt;sup>30</sup> "[T]he lowest running cost units are used to serve native load and other firm contractual obligations" (Appendix A, p. 11). The lowest-cost supply that was available year-round (i.e., excluding hydro) was used.

<sup>&</sup>lt;sup>31</sup> In instances where the purchases could not be matched with FERC Form 1 data, the dispatch price was estimated.

<sup>&</sup>lt;sup>32</sup> These data were supplemented, where necessary, by data from other public sources such as NERC and EPRI. In addition to thermal unit availability, hydro unit availability and generation are specified for each time period. For each of the time periods analyzed, hydro capacity factors have been assigned to each unit based on historical operation. Capacity factors for hydro units were based on five years of Form 759 monthly generation data, reported maximum capacities and, where necessary, assumptions regarding minimum capacity (assumed to be 15 percent of maximum if no data are available).

the unit by the unit's efficiency (heat rate) and adding any additional variable costs that may apply,

such as costs for variable operations and maintenance and costs for environmental controls.<sup>33</sup>

Data used to derive incremental cost estimates for each unit were taken from the following

sources:

- Heat Rates EIA Form 860, supplemented by data reported in Platts' PowerDat database.<sup>34</sup> (Note that the most recently available data from the Form 860 date back to 1995.)
- Fuel Costs FERC Form 423. Unit-specific dispatch costs were derived from fuel cost history and projections of fuel price escalation. Data on spot or interruptible fuel prices as reported in FERC Form 423 from a recent 12-month period served as the base fuel costs for each unit. If a spot price was not available, I assigned the unit a regional average spot price from a report derived from 423 data published by the EIA: *The Cost and Quality of Fuels at Electric Utility Plants*. In all cases, commodity fuel costs were assumed to escalate to 2005 at rates presented in recent forecasts by the EIA.
- Variable O&M \$1/MWh for gas and oil steam units, \$3/MWh for scrubbed coal-fired units and \$2/MWh for other coal-fired units (generic estimates based on trade and industry sources).<sup>35</sup> Additional Variable O&M adders for other unit types are shown in my workpapers.
- Environmental Costs All units covered by Phase II of the Clean Air Act Amendments of 1990 (CAAA) are assessed a variable dispatch adder to cover costs associated with SO2 emissions. This unit-specific cost is calculated using

<sup>&</sup>lt;sup>33</sup> For new merchant generation, incremental costs were estimated on the basis of the energy price reported in relevant regulatory filings, if available. Otherwise, NUGs were assumed to be must-run and the variable costs set to zero. New merchant and cogeneration capacity included in the analysis was priced assuming an average full-load heat rate of 10,000 Btu/kWh for combustion turbines and 7,000 Btu/kWh for combined-cycle plants. These values were derived from an evaluation of existing technology. Variable O&M costs for new units were assumed to be the same as for existing units.

<sup>&</sup>lt;sup>34</sup> I confirmed with Applicants the heat rates for the generation subject to this Transaction, and determined that they were sufficiently similar to those reported in the publicly-available databases. In order to ensure uniformity with other units in the database I used the non-confidential information. The results of my analysis would not be altered by using the slightly different heat rates for Applicants' units.

<sup>&</sup>lt;sup>35</sup> As noted, these variable O&M costs are generic estimates by plant type and do not necessarily match actual individual unit O&M costs. Notably, variable O&M accounts for a minor portion of the dispatch costs used in the analysis, and, importantly, the specific O&M assumption tends not to alter the merit order of the generic types of generation.

the SO2 content of fuel burned at the duit as reported in FERC Form 423 (adjusting for emissions reduction equipment at the facility) and an SO2 allowance cost of \$369/ton.<sup>36</sup> In addition to SO2, the unit dispatch costs also reflect the impact of existing NOx trading programs in the Northeast (OTR).<sup>37</sup> Unit-specific data on NOx rates (lbs/mmBtu) were taken from the EPA's "2000 Acid Rain Program Emission Scorecard."<sup>38</sup> The NOx allowance price for the OTR was assumed to be \$4,817/ton, consistent with the OTR allowance market price index reported by the Environmental Protection Agency.

## B. Transmission

Appendix A of the Merger Policy Statement specifies that the transmission system be modeled on the basis of inter-control area Available Transfer Capability ("ATC") or Total Transfer Capability ("TTC") using transmission prices based on transmission providers' maximum non-firm OATT rates, except where lower rates can be clearly documented. This dictates a transportation representation of the transmission network, and the structure of CASm was designed to conform to Appendix A. This representation remains appropriate for most portions of the United States, where transmission service is generally provided under each transmission provider's OATT. Basing tariffs on OATT rates is increasingly modified by RTO transmission pricing arrangements, however, and the Commission has instructed applicants to account for them.<sup>39,40</sup>

Since I have limited the scope of my analysis to the NYISO and imports from first-tier markets, it was not necessary to reflect ATCs or TTCs beyond transmission into the NYISO. For

<sup>&</sup>lt;sup>36</sup> SO2 emissions are from FERC Form 423 for calendar year 2003 and SO2 costs of \$369 was taken from Evolution Markets LLC's Monthly Market Update - SO2 Markets, May 2004.

<sup>&</sup>lt;sup>37</sup> NOx rates and allowance price (\$15,000/ton) were derived from EPA's 2000 Acid Rain Program Emission Scorecard.

<sup>&</sup>lt;sup>38</sup> In cases where unit-specific data were not available, such as for new capacity, the following boiler level assumptions were applied, based on the unit's fuel type: Coal - 0.4; Oil - 0.2; Natural Gas - 0.1.

<sup>&</sup>lt;sup>39</sup> See Revised Filing Requirements.

<sup>&</sup>lt;sup>40</sup> As I describe below, I do not include the transmission rate into the destination market.

## Exhibit DYN-100

transmission into New York, I relied on information published by the NYISO,<sup>41</sup> which shows an interface limit into New York from ISO-NE of 1,175 MW; 2,800 MW into New York from PJM; 850 MW from Ontario and 1,500 MW from Hydro Quebec.

To incorporate transmission rates into the analysis, I have assumed that transmission charges would be incurred for the transmission system where the generator is located and for wheeling the power through intermediate systems, but not for the destination market. No transmission charge is included for the transmission system in which the load is located.<sup>42</sup> This has no impact on the analysis, since including this charge (the transmission charge included in the bundled rate of the transmission provider in the area where the customer is located, or the "zonal" or postage stamp charges in the case of an RTO) would symmetrically raise the delivered cost for each supply to reach the destination market by the same amount. Thus, the relative economics would not be affected. Losses, which are assumed to be 2.8 percent,<sup>43</sup> are assessed for each wheel incurred along the path to deliver power to the destination market but are not added for the final wheel into the destination market.

## C. Market Prices and Time Periods

For each destination market, I evaluated conditions assuming market prices ranging from \$35/MWh in the Shoulder Off-Peak period ("SH\_OP") to \$150/MWh in the Summer Super Peak period ("S\_SP1") in the NYISO. This broad range of prices, in combination with the time periods,

<sup>&</sup>lt;sup>41</sup> New York Independent System Operator, 2004 Load and Capacity Data, p. 114.

<sup>&</sup>lt;sup>42</sup> Therefore, in effect, I apply no additional transmission charges into the NYISO.

<sup>&</sup>lt;sup>43</sup> This is an average loss factor, for a region much broader than the Northeast. The results of the Competitive Analysis Screen do not depend materially on this assumption.

reflects a sufficient range of system conditions such that the full effect of the Transaction is captured in the analysis. The prices are based on a review of actual 2004 prices, adjusted to reflect forecast fuel price changes in 2005.<sup>44</sup> In any event, none of the Sithe units are economic below about \$50/MWh based on my estimate of fuel costs; thus, by definition, the only periods for which the Transaction may have an effect on market share is when the Sithe units are economic.

Different time periods were modeled to reflect different market conditions based on load levels and on generating availability.<sup>45</sup> Hours were first separated into seasons to reflect differences in generating availability and then further differentiated by load levels during each season. For each season, hours were segmented into peak and off-peak periods.<sup>46</sup>

Three seasons were defined (Summer, Winter, and Shoulder)<sup>47</sup> and ten time periods were constructed representing differing load conditions: on-peak and off-peak with the peak hours

<sup>&</sup>lt;sup>44</sup> I analyzed actual price data to determine how many hours fell within certain price bands. I also calculated average prices from the hourly energy price data series based on my definition of each of the ten time periods. These data are provided in workpapers. While I do not use the resulting prices directly, they helped me determine the appropriate range of destination market prices to analyze.

<sup>&</sup>lt;sup>45</sup> Appendix A of the Merger Policy Statement requires applicants to evaluate the merger's impact on competition under different system conditions. For example, aggregating summer peak and shoulder peak conditions may mask important differences in unit availability and, therefore, a merger could potentially affect competition differently in these seasons. Thus, applicants are directed to evaluate enough sufficiently different conditions to show the merger's impact across a range of system conditions. On the other hand, the DOJ/FTC *Horizontal Merger Guidelines* discuss the ability to "sustain" a price increase, and a finding that a structural test (like the HHI statistic) violates the safe harbor for some subset of hours during the year may not be indicative of any market power problems. Therefore, there is a tradeoff between defining enough periods to capture the merger's impact under different system conditions and defining periods so narrowly as to make the resulting concentration statistics irrelevant to an evaluation of whether a price increase could be sustained.

<sup>&</sup>lt;sup>46</sup> Peak and off-peak hours were defined according to NERC's definition, except that I did not consider Saturdays to be peak days. See <u>ftp://www.nerc.com/pub/sys/all\_updl/oc/opman/apdx1f.doc</u>.

<sup>&</sup>lt;sup>47</sup> Summer includes June through August; Winter includes December through February; and Shoulder includes September through November and March through May. The time period definitions are as follows.

## Exhibit DYN-100

segmented into levels of Super Peaks (two in summer, one in winter and shoulder seasons) and other on-peak hours.

In Order No. 642, the Commission indicated that subperiods should be determined by load levels rather than by time periods. As discussed below, I analyzed each market at prices that range from the levels that would apply at the lowest load levels to those consistent with the highest load levels.

## D. Allocation of Limited Transmission

Appendix A of the Merger Policy Statement notes that there are various methods for allocating transmission, and that applicants should support the method used.<sup>48</sup> For purposes of this analysis, limited transmission capacity was allocated using a prorata "squeeze-down" method, so-named because it seeks to prorate capacity at each node and is the closest approximation to what the Commission applied in *FirstEnergy*<sup>49</sup> that is computationally feasible. Under this method,

Peak (S\_P): Remaining peak hours Off-peak (S\_OP): All off-peak hours

Winter Super Peak (W\_SP): Top 10 percent of peak load hours Peak (W\_P): Remaining peak hours Off-peak (W\_OP): All off-peak hours

Shoulder Super Peak (SH\_SP): Top 10 percent of peak load hours Peak (SH\_P): Remaining peak hours

<sup>&</sup>lt;sup>48</sup> See Order No. 592, ¶ 31,044 at 30,133: "In many cases, multiple suppliers could be subject to the same transmission path limitation to reach the same destination market and the sum of their economic generation capacity could exceed the transmission capability available to them. In these cases, the ATC must be allocated among the potential suppliers for analytic purposes. There are various methods for accomplishing this allocation. Applicants should support the method used."

<sup>&</sup>lt;sup>49</sup> Ohio Edison Company, et al., 80 FERC ¶ 61,039 at 61,107: "When there was more economic capacity (or available economic capacity) outside of a transmission interface than the unreserved capability would allow to be delivered into the destination market, the transmission capability was allocated to the suppliers in proportion to the amount of economic capacity each supplier had outside the interface."

shares of available transmission are allocated at each interface, diluting the importance of distant capacity as it gets closer to the destination market. When there is economic supply (i.e., having a delivered cost less than 105 percent of the destination market price) competing to get through a constrained transmission interface into a control area, the transmission capability is allocated to the suppliers in proportion to the amount of economic supply each supplier has outside the interface.

Shares on each transmission path are based on the shares of deliverable energy at the source node for the particular path being analyzed. The calculations start at the outside of a network, defined with the destination market as its center, and end at the destination market itself. A series of decision rules are required to accomplish this proration. The purpose of these decision rules is limited to assigning a unique power flow direction to each link for any given destination market analysis. Once the links are given a direction, the complex network can be solved. CASm implements a series of rules to determine the direction of the path. The first rule (and the one expected to be applied most frequently) is based on the direction of the flow under an economic allocation of transmission capacity. Other options take into consideration the predominant flow on the line based on desired volume (the amount of economic capacity seeking to reach the destination market, the number of participants seeking to use a path in a particular direction, and the path direction that points toward the destination market).

The model proceeds to assign suppliers at each node a share equal to their maximum supply capability. At each node, "new" suppliers (those located at the node outside of the next interface) are given a share equal to their supply capability, and the shares of more distant suppliers (those who have had to pass through interfaces more remote from the destination market in order to reach the node) are scaled down to match the line capacity into the node. Ultimately, the shares

#### Exhibit DYN-100

at the destination market represent the prorated shares of Economic Capacity that are economically and physically feasible.

## VI. RESULTS OF HORIZONTAL MARKET POWER ANALYSIS

The Transaction has a very small effect on market shares and HHIs in the relevant markets for Economic Capacity, ICAP/UCAP and ancillary services.

#### A. New York ISO

## 1. Economic Capacity

In analyzing Economic Capacity, I took into consideration Dynegy's tolling agreement on the Sithe Independence plant in my pre-Transaction analysis as shown in the table below. Dynegy's share of the Independence plant is 522 MW in the summer, 638 MW in the winter and 578 MW in the shoulder period, based on the seasonal averages of the monthly tolling amounts. The remainder of the output of Independence belongs to Sithe pre-Transaction.

	Shares of Independence (without outages)							
	Pro	e-Acquisitic	n	Post-Acquisition				
	Summer	Winter Should		Summer	Winter	Shoulder		
Dynegy	522.0	638.0	578.0	947.8	1081.9	947.8		
Sithe	425.8	443.9	369.8	0.0	0.0	0.0		
Total	947.8	1081.9	947.8	947.8	1081,9	947.8		

As shown below and in Exhibit DYN-103, on this basis, Dynegy's share of the NYISO market pre-Transaction is at most 6 percent, and Sithe's share is less than 2 percent. The Transaction results in a maximum HHI change of 17 points. The market is unconcentrated in all time periods.

		Г	Pre-Transaction					Post-Transaction				
		Dynegy		Sithe				Dynegy				
Maalaat	Design	Price		Mkt Share		Mkt	Market Size	шш	64167	Mkt		HHI
Market	Period		MW		MW	Share		нні	MW	Share	HHI	Chg.
NYISO	S_SP1	\$150	2,140	4.88%	620	1.41%	43,880	788	2,760	6.29%	801	13
NYISO	S_SP2	\$75	2,134	5.44%	620	1.58%	39,196	750	2,754	7.03%	767	17
NYISO	S_P	\$55	1,448	4.26%	440	1.29%	34,018	723	1,888	5.55%	734	11
NYISO	S_OP	\$40	351	1.60%	0	0.00%	21,972	791	351	1.60%	791	0
NYISO	W_SP	\$75	2,023	5.51%	471	1.28%	36,729	744	2,494	6.79%	758	14
NYISO	W_P	\$60	2,021	5.92%	471	1.38%	34,133	718	2,492	7.30%	734	16
NYISO	W_OP	\$45	312	1.48%	0	0.00%	21,141	766	312	1.48%	766	0
NYISO	SH_SP	\$60	1,954	5.81%	400	1.19%	33,631	721	2,354	7.00%	735	14
NYISO	SH_P	\$55	1,900	5.84%	246	0.76%	32,554	719	2,146	6.59%	728	9
NYISO	SH OP	\$35	313	1.50%	0	0.00%	20,819	759	313	1.50%	759	0

I also evaluated the sensitivity of my treatment of the Dynegy toll of Independence. Exhibit DYN-104 shows the results of the most conservative analysis, which assumes that Sithe controls all of the Independence facility pre-Transaction. The results change only slightly, that is, the HHI changes increase to no more than 26 points. Exhibit DYN-105 shows the results of the analysis assuming that Dynegy controls all of the Independence facility, which yields HHI changes of no more than 9 points. I believe that under an appropriate definition of control, the results presented above and in Exhibit DYN-103 are the most appropriate. But, in any event, the Transaction clearly has no material effect on Economic Capacity.

## 2. Available Economic Capacity

An analysis of Available Economic Capacity adds little in the context of evaluating this Transaction, given that New York, and indeed most of the Northeast region, has full retail access such that measuring Available Economic Capacity is essentially impossible and not particularly informative. While a specific calculation of Available Economic Capacity may be possible for a few entities (e.g., New York Power Authority ), public information is not available concerning the capacity dedicated to serving other provider of last resort and retail access loads. In the circumstance of this Transaction it is clear that such an analysis should not be necessary. The
NYISO has robust hourly energy markets, and a established regime of market monitoring and mitigation.

Notwithstanding these circumstances, in order to demonstrate that there should be no concern about Available Economic Capacity, I used as a proxy for the Available Economic Capacity measure the Commission's new "Wholesale Market Share Analysis Using Uncommitted Capacity" that was introduced as part of a new, interim generation market power analysis in connection with market-based rates.<sup>50</sup> Even in conducting this analysis, the measure of uncommitted capacity requires aggregating generation and loads within the NYISO without regard to specific ownership or individual load obligations. I treat Applicants' generation in the NYISO as uncommitted, and all other generation committed to the extent of load within the NYISO. This is an extremely conservative measure of Applicants' share of uncommitted capacity as the analysis understates the uncommitted supply of competitors. Consistent with the Commission's analyses, I used the minimum peak load by season as the load measure.

As shown in Exhibit DYN-106, based on this measure, Dynegy's pre-Transaction share of uncommitted capacity is 9-10 percent, and Sithe's is 3 percent. Their combined share is well below the threshold of 20 percent market share of concern to the Commission. Moreover, if I were to calculate the HHI change resulting from the Transaction on the basis of these data, the HHI change is below 100 points. While I cannot calculate a market concentration for this measure of

<sup>&</sup>lt;sup>50</sup> Order Implementing New Generation Market Power Analysis and Mitigation Procedures, 107 FERC ¶ 61,036 (2004); AEP Power Marketing, Inc., AEP Service Corporation, CSW Power Marketing, Inc., and Central and South West Services, Inc.; Entergy Services, Inc.; Southern Company Energy Marketing L.P., and Conference on Supply Margin Assessment, Order on Rehearing and Modifying Interim Generation Market Power Analysis and Mitigation Policy, 107 FERC ¶ 61,018 (2004); order on reh'g, 108 FERC ¶ 61,026 (2004).

#### Exhibit DYN-100

Uncommitted Capacity or Available Economic Capacity, these level of market shares in the context of this conservative analysis demonstrate a lack of market power concern.

#### 3. ICAP/UCAP

The impact of this Transaction on relevant ICAP/UCAP markets is small. Typically, one can rely the results of the Economic Capacity test at a very high price (i.e., \$150/MWh) to approximate a UCAP market. The Economic Capacity analysis for summer reflects capacity derated for forced outages, so it is a reasonable proxy for UCAP. I demonstrated in Exhibit DYN-103 that the NYISO market is unconcentrated and the impact of the Transaction was small (post-Transaction market share of 6.3 percent and an HHI change resulting from the Transaction of only 13 points). Moreover, as I also noted earlier, Sithe sells approximately 700 MW of capacity from the Independence plant to Consolidated Edison as UCAP under a long-term contract. With that taken into consideration, the impact of the Transaction on UCAP markets would be diluted significantly further.

#### 4. Ancillary Services

Under the Merger Policy Statement, the Commission requires that Applicants consider the impact of a transaction on markets for ancillary services, specifically reserves and imbalance energy. In reaching my conclusion that the Transaction does not raise any market power concerns with respect to ancillary services, I rely in part on analyses conducted by the NYISO and its market monitor. In its 2003 "State of the Market" report, the NYISO market monitor concluded that "Ancillary services markets are generally not tight because offers to supply typically exceed

approximate demand."<sup>51</sup> Specifically, offers for 30-minute reserves typically exceed demand by 230 percent; offers for ten-minute reserves (east of the Central-East interface) typically exceed demand by 160 percent; and offers for regulation and 10-minute spinning reserves typically exceed demand by 100-170 percent.<sup>52</sup> Non-spinning reserves remain subject to a mandatory offer requirement.

The Dynegy units (Roseton and Danskammer), located on the eastern side of the Central-East interface, account for only 6-11 percent of the capability for 10-minute spin (in Eastern New York) and about 3-5 percent of 30-minute reserves (in all of New York).<sup>53</sup> The Sithe units are not uniquely positioned to provide these ancillary services and, indeed, are located outside of the Eastern New York region in which 1,000 MW of the NYISO's 1,200 MW of required ten-minute reserves must be purchased. Of the Sithe units, only Ogdensburg is currently capable of providing spinning or operating reserves, and its capability represents less than one percent of NYISO's total capability for 30-minute reserves.<sup>54</sup> Clearly, there is no concern about the combination of these units insofar as the effect on ancillary services.

None of the Sithe units are capable of providing regulation, and hence the Transaction has no effect on the supply of regulation.

<sup>&</sup>lt;sup>51</sup> New York ISO State of the Market Report 2003, p. 75.

<sup>&</sup>lt;sup>52</sup> *Ibid.* 

<sup>&</sup>lt;sup>53</sup> The range in shares for the Dynegy plants represents the differences in capability depending on the plant's load level.

<sup>&</sup>lt;sup>54</sup> The New York ISO State of the Market Report 2003 (p. 75) reports total capability for 30-minute reserves of about 11,000 MW. The report also provides information on capability to provide 10-minute spin, 10-minute non-spin and regulation, but only on the eastern side of the Central-East interface. Since the Sithe generation is located on the western side of that interface, I cannot estimate its share of these ancillary services, but I note that even if I were to calculate their share of eastern NYISO capability, it is quite small.

#### Exhibit DYN-100

#### B. PJM

The Transaction has a *de minimis* effect on PJM markets. Because the "extent of business transactions in the same geographic market is *de minimis*," Section 33.3 of the Revised Filing Requirements does not require submission of a horizontal Competitive Analysis Screen.

The facts are straightforward. The Sithe PJM Assets consist only of approximately 50 MW of hydro (Allegheny Hydro facilities). This generation, while under the operational control of Sithe, is fully committed under long-term contract to two unaffiliated buyers. Relative to PJM's current capacity of about 150,000 MW, 50 MW is clearly *de minimis* (less than 0.05 percent), even if added to Dynegy's 2,000 MW in PJM (1.3 percent). Within the smaller, "classic" PJM footprint, the Sithe PJM Assets are only 0.08 percent, but none of Dynegy's generation would be included. Even if I took into consideration that 31 MW of the Allegheny Hydro generation is supplied to a customer in New York, the additional effect of the Transaction would be immaterial. Finally, as noted above, taking into account that the Sithe PJM Assets are affiliated with Exelon, which owns a substantial amount of generation in PJM, the Transaction is actually deconcentrating in the PJM market.

#### C. Other Relevant Issues

I also note that, with respect to the New York Assets (other than Independence), Exelon SHC will continue to have the obligation to fund any cash shortfalls in the event Dynegy notifies Exelon SHC of its intent not to accept financial responsibility for any or all of those units within approximately six months following the Transaction. Under this circumstance, Sithe will continue to own and operate the facilities. This obligation has no effect on my analysis or conclusions: in the absence of the Transaction, I would have included the Sithe assets as part of the generation

portfolio affiliated with Exelon as, indeed, I have in prior analyses submitted to the Commission.<sup>55</sup> Thus, regardless of whether these Sithe assets should be considered under the control of Exelon or Dynegy post-Transaction, my conclusion would be the same, namely that the Transaction raises no market power concerns.

I also considered whether there would be any competitive impact on relevant markets if only the first step of this two-step transaction occurs, namely if Exelon SHC acquires all of RCSE's interests in ExRes pursuant to its call option (as described in the Application). The first step of the transaction would result in Exelon owning all of ExRes and, hence, indirectly owning all of Sithe. As I noted, whether I treat the Sithe generation as under the control of Exelon or Dynegy following the transaction (that is, whether only the first step has occurred, or both steps of the transaction have occurred), my conclusion would be the same, namely that the transaction raises no market power concerns, in either the NYISO or PJM. I base this in part on my recent triennial market power study on behalf of Exelon and Sithe,<sup>56</sup> but also on the fact that my prior analyses of transactions involving Exelon and Sithe have treated Exelon as controlling 100 percent of Sithe.<sup>57</sup> Sithe's PJM Assets represent a *de minimis* share of PJM (or are zero, if one takes into account their long-term sales commitments), and hence a combination with Exelon's affiliated

<sup>&</sup>lt;sup>55</sup> Docket No. EC03-122 (Sithe Energies, et al., 105 FERC ¶ 61, 090 (2003)); Docket EC02-83 (Sithe Energies, et al., 100 FERC ¶ 62,197 (2002)); Docket No. ER99-754-008 et al. as part of Exelon and its affiliates' September 27, 2004 compliance filing in connection with market-based rates; and Docket No. ER98-2782 et al. as part of Sithe and its affiliates' September 27, 2004 compliance filing in connection with market-based rates; and Docket No. ER98-2782 et al. as part of Sithe and its affiliates' September 27, 2004 compliance filing in connection with market-based rates.

<sup>&</sup>lt;sup>56</sup> Exelon and its affiliates' September 27, 2004 compliance filing in connection with market-based rates (Docket No. ER99-754-008 *et al.*); and Sithe and its affiliates September 27, 2004 compliance filing in connection with market-based rates (Docket No. ER98-2782 *et al.*).

<sup>&</sup>lt;sup>57</sup> Docket No. EC03-122 (Sithe Energies, et al., 105 FERC ¶ 61, 090 (2003)); Docket EC02-83 (Sithe Energies, et al., 100 FERC ¶ 62,197 (2002)). Indeed, my analysis in the EC02-83 docket (regarding Exelon's acquisition of Sithe's assets in New England) assumed that Exelon was acquiring Sithe's share of Independence. These transactions raised no competitive concerns

#### Exhibit DYN-100

generation in PJM has little effect on market concentration. Exelon owns no other affiliated generation or contracts in NYISO other than its share of Sithe's New York Assets, and I previously have demonstrated that Exelon's affiliated share of the NYISO market pre-Acquisition is *de minimis*.<sup>58</sup> Therefore, for all these reasons, there is no need for further analysis to demonstrate that the first step of the transaction also raises no market power concerns.

#### VII. VERTICAL MARKET POWER OR BARRIERS TO ENTRY

The Transaction does not raise any competitive concerns with regard to vertical market power. First, there are no transmission market power concerns raised by this acquisition. None of the Applicants own any transmission other than that required to connect their generation to the grid.<sup>59</sup>

The Commission also considers whether applicants have the ability to erect barriers to entry by other suppliers in terms of such things as 1) control of sites for new capacity development other than those that may exist at the sites being acquired; 2) control of fuel inputs to generation; and 3) control of any equipment suppliers or facilities used to transport fuels or other inputs to generation.<sup>60</sup>

Neither Applicants nor their affiliates control critical sites for new capacity development in relevant markets. The Northeast market for the development of merchant plants has been robust,

<sup>&</sup>lt;sup>58</sup> Docket EC02-83 (*Sithe Energies, et al.*, 100 FERC ¶ 62,197 (2002)). Also, my workpapers in this docket confirm that Exelon's share of the NYISO market is *de minimis*.

<sup>&</sup>lt;sup>59</sup> I note that Sithe's affiliate, Exelon Generation, itself has affiliated transmission assets in PJM. Not only are these transmission assets under the control of PJM and subject to the terms and conditions of the PJM OATT, they are not relevant to this Acquisition.

<sup>&</sup>lt;sup>60</sup> Doswell Limited Partnership, 50 FERC ¶ 61,251 (1990); Entergy, 58 FERC ¶ 61,234 (1992).

#### Exhibit DYN-100

and the substantial new entry of additional generation in these markets demonstrates the absence of entry barriers.

Finally, neither Applicants nor their affiliates control fuel inputs to generators, nor control any equipment suppliers or facilities used to transport fuels or other inputs to generation in relevant markets.<sup>61</sup>

#### VIII. CONCLUSION

The market power analyses discussed herein demonstrate that the Transaction is unlikely to have anti-competitive effects in any of the relevant markets. No other relevant concerns exist with respect to competition issues.

<sup>&</sup>lt;sup>61</sup> Of course, both Sithe and Dynegy have various fuels purchase and transportation contracts to support their generating facilities.

# WILLIAM H. HIERONYMUS — Vice President

Ph.D.	Economics, University of Michigan
M.A.	Economics, University of Michigan
B.A.	Social Science, University of Iowa

William Hieronymus has consulted extensively to managements of electricity and gas companies, their counsel, regulators, and policymakers. His principal areas of concentration are the structure and regulation of network utilities and associated management, policy, and regulatory issues. Dr. Hieronymus has spent the last fourteen years working on the restructuring and privatization of utility systems in the U.S. and internationally. In this context he has assisted the managements of energy companies on corporate and regulatory strategy, particularly relating to asset acquisition and divestiture. He has testified extensively on regulatory policy issues and on market power issues related to mergers and acquisitions. In his twenty-five years of consulting to this sector, he also has performed a number of more specific functional tasks, including analyzing potential investments; assisting in negotiation of power contracts, tariff formation, demand forecasting, and fuels market forecasting. Dr. Hieronymus has testified frequently on behalf of energy sector clients before regulatory bodies, federal courts, and legislative bodies in the United States and United Kingdom. He has contributed to numerous projects, including the following:

# ELECTRICITY SECTOR STRUCTURE, REGULATION, AND RELATED MANAGEMENT AND PLANNING ISSUES

#### **U.S. Market Restructuring Assignments**

- Dr. Hieronymus serves as an advisor to the senior executives of electric utilities on restructuring and related regulatory issues, and he has worked with senior management in developing strategies for shaping and adapting to the emerging competitive market in electricity. Related to some of these assignments, he has testified before state agencies on regulatory policies and on contract and asset valuation.
- For utilities seeking merger approval, Dr. Hieronymus has prepared and testified to market power analyses at FERC and before state commissions. He also has assisted in discussions with the Antitrust Division of the Department of Justice and in responding to information requests. The mergers on which Dr. Hieronymus has testified include both electricity mergers and combination mergers involving electricity and gas companies. Among the major mergers on which he has testified are Sempra (Enova and Pacific Enterprises), Xcel (New Century Energy and Northern States Power),

#### WILLIAM H. HIERONYMUS — Page 2

Exelon (Commonwealth Edison and Philadelphia Electric), AEP (American Electric Power and Central and Southwest), Dynegy-Illinois Power, Con Edison-Orange and Rockland, Dominion-Consolidated Natural Gas, NiSource-Columbia Energy, E-on-PowerGen/LG&E and NYSEG-RG&E. He also submitted testimony in mergers that were terminated for unrelated reasons, including Entergy-Florida Power and Light and Consolidated Edison-Northeast Utilities. Testimony on similar topics has been filed for a number of smaller utility mergers and for asset acquisitions. Dr Hieronymus has also assisted numerous clients in the pre-merger screening of potential acquisitions and merger partners.

- For utilities seeking to establish or extend market rate authority, Dr. Hieronymus has provided numerous analyses concerning market power in support of submissions under Sections 205 of the Federal Power Act.
- For utilities and power pools engaged in restructuring activities, he has assisted in examining various facets of proposed reforms. Such analysis has included features of the proposals affecting market efficiency and those that have potential consequences for market power. Where relevant, the analysis also has examined the effects of alternative reforms on the client's financial performance and achievement of other objectives.
- For generators and marketers, Dr. Hieronymus has testified extensively in the regulatory proceedings concerning the electricity crisis in the WECC that occurred during May 2000 and May 2001. His testimony concerned, *inter alia*, the economics of long term contracts entered into during that period the behavior of market participants during the crisis period and the nexus between purportedly dysfunctional spot markets and forward contracts.
- For the New England Power Pool (NEPOOL), Dr. Hieronymus examined the issue of market power in connection with NEPOOL's movement to market-based pricing for energy, capacity, and ancillary services. He also assisted the New England utilities in preparing their market power mitigation proposal. The main results of his analysis were incorporated in NEPOOL's market power filing before FERC and in ISO-New England's market power mitigation rules.
- For a coalition of independent generators, he provided affidavits advising FERC on changes to the rules under which the northeastern U.S. power pools operate.
- As part of a large planning and analysis team, Dr. Hieronymus assisted a Midwest utility in developing an innovative proposal for electricity industry restructuring.
- Dr. Hieronymus has contributed substantially to projects dealing with the restructuring of the California electricity industry. In this context he also is a witness in California and FERC proceedings on the subject of market power and mitigation and more recently before FERC in connection with transactions related to PG&E's bankruptcy and on the contracts signed between merchant generators and various buyers.

#### WILLIAM H. HIERONYMUS --- Page 3

#### Valuation of Utility Assets in North America

- Dr. Hieronymus has testified in state securitization and stranded cost quantification proceedings, primarily in forecasting the level of market prices that should be used in assessing the future revenues and the operating contribution earned by the owner of utility assets in energy and capacity markets. The market price analyses are tailored to the specific features of the market in which a utility will operate and reflect transmission-constrained trading over a wide geographic area. He also has testified in rebuttal to other parties' testimony concerning stranded costs, and has assisted companies in internal stranded cost and asset valuation studies.
- He was the primary valuation witness on behalf of a western utility in an arbitration proceeding concerning the value of a combined cycle plant coming off lease that the utility wished to purchase.
- He assisted a bidder in determining the commercial terms of plant purchase offers as well as assisting clients in assessing the regulatory feasibility of potential acquisitions and mergers.

#### **Other U.S. Utility Engagements**

- Dr. Hieronymus has contributed to the development of several benchmarking analyses for U.S. utilities. These have been used in work with clients to develop regulatory proposals, set cost reduction targets, restructure internal operations, and assess merger savings.
- Dr. Hieronymus was a co-developer of a market simulation package tailored to regionspecific applications. He and other senior personnel have conducted numerous multiday training sessions using the package to help utility clients in educating management regarding the consequences of wholesale and retail deregulation and in developing the skills necessary to succeed in this environment.
- He has made numerous presentations to U.S. utility managements regarding overseas electricity systems.
- For an East Coast electricity holding company, Dr. Hieronymus prepared and testified to an analysis of the logic and implementation issues concerning utility-sponsored conservation and demand-management programs as alternatives to new plant construction.
- In connection with nuclear generating plants nearing completion, he has testified in Pennsylvania, Louisiana, Arizona, Illinois, Missouri, New York, Texas, Arkansas, New Mexico, and before the Federal Energy Regulatory Commission regarding plant-inservice rate cases on the issues of equitable and economically efficient treatment of plant costs for tariff-setting purposes, regulatory treatment of new plants in other jurisdictions, the prudence of past system planning decisions and assumptions, performance incentives, and the life-cycle costs and benefits of the units. In these and other utility regulatory proceedings, Dr. Hieronymus and his collcagues have provided

#### WILLIAM H. HIERONYMUS — Page 4

extensive support to counsel, including preparation of interrogatories, crossexamination support, and assistance in writing briefs.

- On behalf of utilities in the states of Michigan, Massachusetts, New York, Maine, Indiana, Pennsylvania, New Hampshire, and Illinois, he has submitted testimony in regulatory proceedings on the economics of completing nuclear generating plants that were then under construction. His testimony has covered the likely cost of plant completion; forecasts of operating performance; and extensive analyses of the impacts of completion, deferral, and cancellation upon ratepayers and shareholders. For the senior managements and boards of utilities engaged in nuclear plant construction, Dr. Hieronymus has performed a number of highly confidential assignments to support strategic decisions concerning the continuance of construction.
- For an eastern Pennsylvania utility that suffered a nuclear plant shutdown due to NRC sanctions relating to plant management, he filed testimony regarding the extent to which replacement power cost exceeded the costs that would have occurred but for the shutdown.
- For a major Midwestern utility, Dr. Hieronymus headed a team that assisted senior management in devising its strategic plans, including examination of such issues as plant refurbishment/life extension strategies, impacts of increased competition, and available diversification opportunities.
- On behalf of two West Coast utilities, Dr. Hieronymus testified in a needs certification hearing for a major coal-fired generation complex concerning the economics of the facility relative to competing sources of power, particularly unconventional sources and demand reductions.
- For a large western combination utility, he participated in a major 18-month effort to provide the client with an integrated planning and rate case management system.
- For two Midwestern utilities, Dr. Hieronymus prepared an analysis of intervenorproposed modifications to the utilities' resource plans. He then testified on their behalf before a legislative committee.

#### **U.K. Assignments**

• Following promulgation of the white paper that established the general framework for privatization of the electricity industry in the United Kingdom, Dr. Hieronymus participated extensively in the task forces charged with developing the new market system and regulatory regime. His work on behalf of the Electricity Council and the twelve regional distribution and retail supply companies focused on the proposed regulatory regime, including the price cap and regulatory formulas, and distribution and transmission use of system tariffs. He was an active participant in industry-government task forces charged with creating the legislation, regulatory framework, initial contracts, and rules of the pooling and settlements system. He also assisted the regional

#### WILLIAM H. HIERONYMUS --- Page 5

companies in the valuation of initial contract offers from the generators, including supporting their successful refusal to contract for the proposed nuclear power plants that subsequently were canceled as being non-commercial.

- During the preparation for privatization, Dr. Hieronymus assisted several individual U.K. electricity companies in understanding the evolving system, in developing use of system tariffs, and in enhancing commercial capabilities in power purchasing and contracting. He continued to advise a number of clients, including regional companies, power developers, large industrial customers, and financial institutions on the U.K. power system for a number of years after privatization.
- Dr. Hieronymus assisted four of the regional electricity companies in negotiating equity ownership positions and developing the power purchase contracts for a 1,825 megawatt combined cycle gas station. He also assisted clients in evaluating other potential generating investments including cogeneration and non-conventional resources.
- Dr. Hieronymus also has consulted on the separate reorganization and privatization of the Scottish electricity sector. Part of his role in that privatization included advising the larger of the two Scottish companies and, through it, the Secretary of State on all phases of the restructuring and privatization, including the drafting of regulations, asset valuation, and company strategy.
- He assisted one of the Regional Electricity Companies in England and Wales in the 1993 through 1995 regulatory proceedings that reset the price caps for its retailing and distribution businesses. Included in this assignment was consideration of such policy issues as incentives for the economic purchasing of power, the scope of price control, and the use of comparisons among companies as a basis for price regulation. Dr. Hieronymus's model for determining network refurbishment needs was used by the regulator in determining revenue allowances for capital investments.
- He assisted one of the Regional Electricity Companies in its defense against a hostile takeover, including preparation of its submission to the Cabinet Minister who had the responsibility for determining whether the merger should be referred to the competition authority.

#### Assignments Outside the U.S. and U.K.

- Dr. Hieronymus assisted a large state-owned European electricity company in evaluating the impacts of the 1997 EU directive on electricity that *inter alia* requires retail access and competitive markets for generation. The assignment included advice on the organizational solution to elements of the directive requiring a separate transmission system operator and the business need to create a competitive marketing function.
- For the European Bank for Reconstruction and Development, he performed analyses of least-cost power options and evaluated the return on a major investment that the Bank was considering for a partially completed nuclear plant in Slovakia. Part of this

#### WILLIAM H. HIERONYMUS — Page 6

assignment involved developing a forecast of electricity prices, both in Eastern Europe and for potential exports to the West.

- For the OECD he performed a study of energy subsidies worldwide and the impact of subsidy elimination on the environment, particularly on greenhouse gases.
- For the Magyar Villamos Muvek Troszt, the electricity company of Hungary, Dr. Hieronymus developed a contract framework to link the operations of the different entities of an electricity sector in the process of moving from a centralized commandand-control system to a decentralized, corporatized system.
- For Iberdrola, the largest investor-owned Spanish electricity company, he assisted in development of their proposal for a fundamental reorganization of the electricity sector, its means of compensating generation and distribution companies, its regulation, and the phasing out of subsidies. He also has assisted the company in evaluating generation expansion options and in valuing offers for imported power.
- Dr. Hieronymus contributed extensively to a project for the Ukrainian Electricity Ministry, the goal of which was to reorganize the Ukrainian electricity sector and prepare it for transfer to the private sector and the attraction of foreign capital. The proposed reorganization is based on regional electric power companies, linked by a unified central market, with market-based prices for electricity.
- At the request of the Ministry of Power of the USSR, Dr. Hieronymus participated in the creation of a seminar on electricity restructuring and privatization. The seminar was given for 200 invited Ministerial staff and senior managers for the USSR power system. His specific role was to introduce the requirements and methods of privatization. Subsequent to the breakup of the Soviet Union, Dr. Hieronymus continued to advise both the Russian energy and power ministry and the government-owned generation and transmission company on restructuring and market development issues.
- On behalf of a large continental electricity company, Dr. Hieronymus analyzed the proposed directives from the European Commission on gas and electricity transit (open access regimes) and on the internal market for electricity. The purpose of this assignment was to forecast likely developments in the structure and regulation of the electricity sector in the common market and to assist the client in understanding their implications.
- For the electric utility company of the Republic of Ireland, he assessed the likely economic benefit of building an interconnector between Eire and Wales for the sharing of reserves and the interchange of power.
- For a task force representing the Treasury, electricity generating, and electricity distribution industries in New Zealand, Dr. Hieronymus undertook an analysis of industry structure and regulatory alternatives for achieving the economically efficient generation of electricity. The analysis explored how the industry likely would operate under alternative regimes and their implications for asset valuation, electricity pricing, competition, and regulatory requirements.

#### WILLIAM H. HIERONYMUS — Page 7

#### TARIFF DESIGN METHODOLOGIES AND POLICY ISSUES

- Dr. Hieronymus participated in a series of studies for the National Grid Company of the United Kingdom and for ScottishPower on appropriate pricing methodologies for transmission, including incentives for efficient investment and location decisions.
- For a U.S. utility client, he directed an analysis of time-differentiated costs based on accounting concepts. The study required selection of rating periods and allocation of costs to time periods and within time periods to rate classes.
- For EPRI, Dr. Hieronymus directed a study that examined the effects of time-of-day rates on the level and pattern of residential electricity consumption.
- For the EPRI-NARUC Rate Design Study, he developed a methodology for designing optimum cost-tracking block rate structures.
- On behalf of a group of cogenerators, Dr. Hieronymus filed testimony before the Energy Select Committee of the UK Parliament on the effects of prices on cogeneration development.
- For the Edison Electric Institute (EEI), he prepared a statement of the industry's position on proposed federal guidelines regarding fuel adjustment clauses. He also assisted EEI in responding to the U.S. Department of Energy (DOE) guidelines on cost-of-service standards.
- For private utility clients, Dr. Hieronymus assisted in the preparation both of their comments on draft FERC regulations and of their compliance plans for PURPA Section 133.
- For a state utilities commission, Dr. Hieronymus assessed its utilities' existing automatic adjustment clauses to determine their compliance with PURPA and recommended modifications.
- For DOE, he developed an analysis of automatic adjustment clauses currently employed by electric utilities. The focus of this analysis was on efficiency incentive effects.
- For the commissioners of a public utility commission, Dr. Hieronymus assisted in preparation of briefing papers, lines of questioning, and proposed findings of fact in a generic rate design proceeding.

#### SALES FORECASTING METHODOLOGIES FOR GAS AND ELECTRIC UTILITIES

• For the White House Sub-Cabinet Task Force on the future of the electric utility industry, Dr. Hieronymus co-directed a major analysis of "least-cost planning studies" and "low-growth energy futures." That analysis was the sole demand-side study commissioned by the task force, and it formed a basis for the task force's conclusions

#### WILLIAM H. HIERONYMUS — Page 8

concerning the need for new facilities and the relative roles of new construction and customer side-of-the-meter programs in utility planning.

- For a large eastern utility, Dr. Hieronymus developed a load forecasting model designed to interface with the utility's revenue forecasting system-planning functions. The model forecasts detailed monthly sales and seasonal peaks for a 10-year period.
- For DOE, he directed development of an independent needs assessment model for use by state public utility commissions. This major study developed the capabilities required for independent forecasting by state commissions and provided a forecasting model for their interim use.
- For state regulatory commissions, Dr. Hieronymus has consulted in the development of service area-level forecasting models of electric utility companies.
- For EPRI, he authored a study of electricity demand and load forecasting models. The study surveyed state-of-the-art models of electricity demand and subjected the most promising models to empirical testing to determine their potential for use in long-term forecasting.
- For a Midwestern electric utility, he provided consulting assistance in improving the client's load forecast, and testified in defense of the revised forecasting models.
- For an East Coast gas utility, Dr. Hieronymus testified with respect to sales forecasts and provided consulting assistance in improving the models used to forecast residential and commercial sales.

#### OTHER STUDIES PERTAINING TO REGULATED AND ENERGY COMPANIES

In a number of antitrust and regulatory matters, Dr. Hieronymus has performed • analyses and litigation support tasks. These cases have included Sherman Act Section 1 and 2 allegations, contract negotiations, generic rate hearings, ITC hearings, and a major asset valuation suit. In a major antitrust case, he testified with respect to the demand for business telecommunications services and the impact of various practices on demand and on the market share of a new entrant. For a major electrical equipment vendor, Dr. Hieronymus testified on damages with respect to alleged defects and associated fraud and warranty claims. In connection with mergers for which he is the market power expert, Dr. Hieronymus assists clients in Hart-Scott-Rodino investigations by the Antitrust Division of the U.S. Department of Justice and the Federal Trade Commission. In an arbitration case, he testified as to changed circumstances affecting the equitable nature of a contract. In a municipalization case, he testified concerning the reasonable expectation period for the supplier of power and transmission services to a municipality. In two Surface Transportation Board proceedings, he testified on the sufficiency of product market competition to inhibit the exercise of market power by railroads transporting coal to power plants.

#### WILLIAM H. HIERONYMUS — Page 9

- For a landholder, Dr. Hieronymus examined the feasibility and value of an energy conversion project that sought a long-term lease. The analysis was used in preparing contract negotiation strategies.
- For an industrial client considering development and marketing of a total energy system for cogeneration of electricity and low-grade heat, Dr. Hieronymus developed an estimate of the potential market for the system by geographic area.
- For the U.S. Environmental Protection Agency (EPA), he was the principal investigator in a series of studies that forecasted future supply availability and production costs for various grades of steam and metallurgical coal to be consumed in process heat and utility uses.

Dr. Hieronymus has been an invited speaker at numerous conferences on such issues as market power, industry restructuring, utility pricing in competitive markets, international developments in utility structure and regulation, risk analysis for regulated investments, price squeezes, rate design, forecasting customer response to innovative rates, intervener strategies in utility regulatory proceedings, utility deregulation, and utility-related opportunities for investment bankers.

Prior to rejoining CRA in June 2001, Dr. Hieronymus was a Member of the Management Group at PA Consulting, which acquired Hagler Bailly, Inc. in October 2000. He was a Senior Vice President of Hagler Bailly. In 1998, Hagler Bailly acquired Dr. Hieronymus's former employer, Putnam, Hayes & Bartlett, Inc. He was a Managing Director at PHB. He joined PHB in 1978. From 1973 to 1978 he was a Senior Research Associate at CRA. Previously, he served as a project director at Systems Technology Corporation and as an economist while serving as a Captain in the U.S. Army.

#### Exhibit DYN-102

NERC Region	Control Area	Unit Name	Primary Fuel Type	Summer Rating (MW)	Winter Rating (MW)	Ownership Share	Purchases (Sales)	Net Interest (Summer MW)
Sithe Ger	neration							
NPCC	NYISO	Batavia	Natural Gas	55.8	62.6	100%		55.8
NPCC	NYISO	Independence	Natural Gas	947.8	1,081.9	100%	(522) <sup>1/</sup>	425.8
NPCC	NYISO	Massena	Natural Gas	80.6	90.6	100%	· · ·	80.6
NPCC	NYISO	Ogdensburg	Natural Gas	76.3	87.8	100%		76.3
NPCC	NYISO	Sterling	Natural Gas	55.1	65.0	100%		55.1
			Subtotal	1,215.6	1,387.9			693.6
ECAR	PJM	Allegheny Hydro 5	Hydro	9.2	9.2	100%	(9)	0.0
ECAR	PJM	Allegheny Hydro 6	Hydro	9.2	9.2	100%	(9)	0.0
ECAR	РЈМ	Allegheny Hydro 8	Hydro	13.6	13.6	100%	(14)	0.0
ECAR	РЈМ	Allegheny Hydro 9	Hydro	17.8	17.8	100%	(18)	0.0
		-	Subtotal	49.8	49.8		(50)	0.0
	_		Total	1,265.4	1,437.7			693.6
Dyneay (	Generation i	in Northeast/PJ	IM					
NPCC	NYISO	Danskammer	Coal/Oil	497.4	498.0	100%		497.4
NPCC	NYISO	Roseton	Oil	1,206.7	1,215.5	100%		1,206.7
NPCC	NYISO	Independence (Toll)	Natural Gas	-,	.,		522 <sup>1/</sup>	522.0
			Subtotal	1,704.1	1,713.5			2,226.1
ECAR	РЈМ	Riverside	Natural Gas	825.0	950.0	100%		825.0
ECAR	PJM	Rolling Hills	Natural Gas	680.0	784.0	100%		680.0
MAIN	PJM	Rocky Road (I and II		340.0	400.7	50%	(170)	0.0
MAIN	PJM	Purchase from Kend	,	0.0	0.0		550	550.0
			Subtotal	1,845.0	2,134.7			2,055.0
			Total	3,549.1	3,848.2			4,281.1

<sup>1/</sup> This sale/purchase represents a tolling agreement with Dynegy. The amount varies by season, from 522 MW to 638 MW.

Sources: For NYISO: NYISO 2004 Load & Capacity Data. (Independence Winter rating from Sithe, reflecting an updated rating.) For ECAR and MAIN: Energy Information Administration, Existing Electric Generating Units in the United States, 2003.

## Exhibit DYN-103

		Г		Pre-Transaction					Post-Transaction					
		Dynegy		Sithe				Dynegy						
Market	Period	Price	MW	Mkt Share	MW	Mkt Share	Market Size	HHI	мw	Mkt Share	нні	HHI Chg.		
NYISO	S SP1	\$150	2,140	4.88%	620	1.41%	43.880	788	2,760	6.29%	801	13		
NYISO	S_SP2	\$75	2,134	5.44%	620	1.58%	39,196	750	2,754	7.03%	767	17		
NYISO	S_P	\$55	1,448	4.26%	440	1.29%	34,018	723	1,888	5.55%	734	11		
NYISO	S_OP	\$40	351	1.60%	0	0.00%	21,972	791	351	1.60%	791	0		
NYISO	W_SP	\$75	2,023	5.51%	471	1.28%	36,729	744	2,494	6.79%	758	14		
NYISO	W_P	\$60	2,021	5.92%	471	1.38%	34,133	718	2,492	7.30%	734	16		
NYISO	W_OP	\$45	312	1.48%	0	0.00%	21,141	766	312	1.48%	766	0		
NYISO	SH_SP	\$60	1,954	5.81%	400	1.19%	33,631	721	2,354	7.00%	735	14		
NYISO	SH_P	\$55	1,900	5.84%	246	0.76%	32,554	719	2,146	6.59%	728	9		
NYISO	SH_OP	\$35	313	1.50%	0	0.00%	20,819	759	313	1.50%	759	0		

Economic Capacity: Dynegy Toll on Independence Pre-Transaction

Pre-Transaction: Dynegy has a tolling agreement for a portion of the output from Independence, ranging from 522 MW to 638 MW (depending on the season).

	:	Shares of Independence (without outages)											
	Pre	e-Transactio	, D	Post-Transaction									
	Summer	Winter	Summer	Winter	Shoulder								
Dynegy	522.0	638.0	578.0	947.8	1081.9	947.8							
Sithe	425.8	443.9	369.8	0.0	0.0	0.0							
Total	947.8	1081.9	947.8	947.8	1081.9	947.8							

# Exhibit DYN-104

					Post-Transaction							
		-	Dyn	egy Mkt	Sit	he Mkt	Market		Dyn	egy Mkt		нні
Market	Period	Price	MW	Share	MW	Share	Size	HHI	MW	Share	нні	Chg.
NYISO	S_SP1	\$150	1,618	3.69%	1,142	2.60%	43,880	782	2,760	6.29%	801	19
NYISO	S_SP2	\$75	1,612	4.11%	1,142	2.91%	39,196	743	2,754	7.03%	767	24
NYISO	S_P	\$55	926	2.72%	962	2.83%	34,018	719	1,888	5.55%	734	15
NYISO	S_OP	\$40	351	1.60%	0	0.00%	21,972	791	351	1.60%	791	0
NYISO	W_SP	\$75	1,385	3.77%	1,109	3.02%	36,729	735	2,494	6.79%	758	23
NYISO	W_P	\$60	1,383	4.05%	1,109	3.25%	34,133	708	2,492	7.30%	734	26
NYISO	W_OP	\$45	312	1.48%	0	0.00%	21,141	766	312	1.48%	766	0
NYISO	SH_SP	\$60	1,376	4.09%	978	2.91%	33,631	711	2,354	7.00%	735	24
NYISO	SH_P	\$55	1,322	4.06%	824	2.53%	32,554	708	2,146	6.59%	728	20
NYISO	SH_OP	\$35	313	1.50%	0	0.00%	20,819	759	313	1.50%	759	0

Economic Capacity: Sithe Assumed to Control Independence Pre-Transaction

Pre-Transaction: Sithe is assumed to have control over 100% of Independence.

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## Exhibit DYN-105

		Г	Pre-Transaction							Post-Transaction			
		-	Dynegy Mkt		Sithe		Market		Dynegy			нні	
Market	Period	Price	MW	Share	MW	Mkt Share	Size	нні	MW	Mkt Share	нні	ппі Chg.	
NYISO	S_SP1	\$150	2,508	5.72%	252	0.57%	43,880	795	2,760	6.29%	801	6	
NYISO	S_SP2	\$75	2,502	6.38%	252	0.64%	39,196	759	2,754	7.03%	767	8	
NYISO	S_P	\$55	1,816	5.34%	72	0.21%	34,018	732	1,888	5.55%	734	2	
NYISO	S_OP	\$40	351	1.60%	0	0.00%	21,972	791	351	1.60%	791	0	
NYISO	W_SP	\$75	2,255	6.14%	239	0.65%	36,729	750	2,494	6.79%	758	8	
NYISO	W_P	\$60	2,253	6.60%	239	0.70%	34,133	725	2,492	7.30%	734	9	
NYISO	W_OP	\$45	312	1.48%	0	0.00%	21,141	766	312	1.48%	766	0	
NYISO	SH_SP	\$60	2,139	6.36%	215	0.64%	33,631	727	2,354	7.00%	735	8	
NYISO	SH_P	\$55	2,085	6.40%	61	0.19%	32,554	726	2,146	6.59%	728	2	
NYISO	SH_OP	\$35	313	1.50%	0	0.00%	20,819	759	313	1.50%	759	0	

Economic Capacity: Dynegy Assumed to Control Independence Pre-Transaction

Pre-Transaction: Dynegy is assumed to have control over 100% of Independence. Post-Transaction: Dynegy owns all of the Sithe generation in New York and PJM.

# Available Economic Capacity (NYISO)

	Winter	Spring	Summer	Fall
Capacity Owned or Controlled by Sithe	750	638	694	638
Native Load Commitments	-	-	-	-
Operating Reserves	(34)	(30)	(33)	(30)
Planned Outages	(76)	(83)	(31)	(64)
Subtotal	640	525	630	544
Share of Import Capability (for Sithe units in PJM)	32	32	32	32
Sithe Uncommitted Capacity	672	557	662	576
Capacity Owned or Controlled by Dynegy	2,352	2,282	2,226	2,282
Native Load Commitments	-	-	-	-
Operating Reserves	(107)	(108)	(105)	(108)
Planned Outages	(237)	(296)	(99)	(228)
Subtotal	2,008	1,879	2,021	1,946
Share of Import Capability (for Dynegy units in PJM)	99	93	76	85
Dynegy Uncommitted Capacity	2,107	1,972	2,098	2,031
Capacity of Other NYISO Generation	36,402	35,191	35,191	35,191
Native Load Commitments (at Minimum Peak Load Day)	(20,226)	(17,858)	(18,921)	(18,893)
Operating Reserves	(1,659)	(1,662)	(1,662)	(1,662)
Planned Outages	(3,665)	(4,559)	(1,573)	(3,521)
Competing Uncommitted Capacity	10,853	11,112	13,035	11,115
Imports (adjusted for Applicants' share)	5,864	5,870	5,887	5,878
Total Uncommitted Supply	19,364	19,386	21,573	19,483
Pre-Transaction Market Shares				
Sithe	3%	3%	3%	3%
Dynegy	10%	10%	9%	10%
HHI Change	69	52	55	56

#### **Economic Capacity**

		Г			Pre-Tra	nsaction			Post-Transaction			
			Dynegy		Sithe			<u> </u>		/negy		
				Mkt		Mkt	Market			Mkt		HHI
Market	Period	Price	MW	Share	MW	Share	Size	HHI	MW	Share	HHI	Chg.
NYISO	S_SP1	\$150	2,140	4.88%	620	1.41%	43,880	788	2,760	6.29%	801	13
NYISO	S_SP2	\$75	2,134	5.44%	620	1.58%	39,196	750	2,754	7.03%	767	17
NYISO	S_P	\$55	1,448	4.26%	440	1.29%	34,018	723	1,888	5.55%	734	11
NYISO	S_OP	\$40	351	1.60%	0	0.00%	21,972	791	351	1.60%	791	0
NYISO	W_SP	\$75	2,023	5.51%	471	1. <b>28%</b>	36,729	744	2,494	6.79%	758	14
NYISO	W_P	\$60	2,021	5.92%	471	1.38%	34,133	718	2,492	7.30%	734	16
NYISO	W_OP	\$45	312	1.48%	0	0.00%	21,141	766	312	1.48%	766	0
NYISO	SH_SP	\$60	1,954	5.81%	400	1.19%	33,631	721	2,354	7.00%	735	14
NYISO	SH_P	\$55	1,900	5.84%	246	0.76%	32,554	719	2,146	6.59%	728	9
NYISO	SH_OP	\$35	313	1.50%	0	0.00%	20,819	759	313	1.50%	759	0

Pre-Transaction: Dynegy has a tolling agreement for a portion of the output from Independence, ranging from 522 MW to 638 MW (depending on the season).

	:	Shares of Independence (without outages)										
	Pre	e-Transactio	n	Post-Transaction								
	Summer Winter Shoulder Summer Winter Sho											
Dynegy	522.0	638.0	578.0	947.8	1081.9	947.8						
Sithe	425.8	443.9	369.8	0.0	0.0	0.0						
Total	947.8	1081.9	947.8	947.8	1081.9	947.8						

Economic Capacity, Upstate New York (including Imports)

		Ľ			Pre-Tra		Post-Transaction					
			Dyn	egy Mkt	Sit	he Mkt	Market		Dyn	egy Mkt		нні
Market	Period	Price	MW	Share	MW	Share	Size	нні	MW	Share	HHI	Chg.
Upstate	S_SP1	\$150	2,140	6.79%	620	1.97%	31,500	736	2,760	8.76%	762	26
Upstate	S_SP2	\$75	2,134	6.88%	620	2.00%	31,016	745	2,754	8.88%	773	28
Upstate	S_P	\$55	1,448	5.11%	440	1.55%	28,321	735	1,888	6.67%	751	16
Upstate	S_OP	\$40	351	1.70%	0	0.00%	20,706	779	351	1.70%	779	0
Upstate	W_SP	\$75	2,023	6.93%	471	1.61%	29,203	750	2,494	8.54%	772	22
Upstate	W_P	\$60	2,021	7.21%	471	1.68%	28,013	742	2,492	8.90%	767	25
Upstate	W_OP	\$45	312	1.57%	0	0.00%	19,844	771	312	1.57%	771	0
Upstate	SH_SP	\$60	1,954	7.08%	400	1.45%	27,582	746	2,354	8.53%	767	21
Upstate	SH_P	\$55	1,900	7.12%	246	0.92%	26,697	749	2,146	8.04%	762	13
Upstate	SH_OP	\$35	313	1.60%	0	0.00%	19,622	766	313	1.60%	766	0

Pre-Transaction: Dynegy has a tolling agreement for a portion of the output from Independence, ranging from 522 MW to 638 MW (depending on the season).

Economic Capacity, Upstate New York (excluding Imports)

		Ľ		Pre-Transaction						Post-Transaction				
			Dyne	egy Mkt	Sit	he Mkt	Market		Dyn	egy Mkt		нні		
Market	Period	Price	MW	Share	MW	Share	Size	HHI	MW	Share	HHI	Chg.		
Upstate	S_SP1	\$150	2,136	9.04%	620	2.62%	23,639	1,122	2,756	11.66%	1,169	47		
Upstate	S_SP2	\$75	2,131	9.19%	620	2.67%	23,182	1,150	2,751	11.87%	1,199	49		
Upstate	S_P	\$55	1,447	7.05%	440	2.14%	20,537	1,174	1,887	9.19%	1,204	30		
Upstate	S_OP	\$40	351	2.71%	0	0.00%	12,949	1,481	351	2.71%	1,481	0		
Upstate	W_SP	\$75	2,020	9.35%	471	2.18%	21,600	1,181	2,491	11.53%	1,222	41		
Upstate	W_P	\$60	2,020	9.90%	471	2.31%	20,411	1,191	2,491	12.20%	1,236	45		
Upstate	W_OP	\$45	312	2.55%	0	0.00%	12,217	1,517	312	2.55%	1,517	0		
Upstate	SH_SP	\$60	1,952	9.77%	400	2.00%	19,982	1,207	2,352	11.77%	1,246	39		
Upstate	SH_P	\$55	1,899	9.94%	246	1.29%	19,097	1,234	2,145	11.23%	1,259	25		
Upstate	SH_OP	\$35	312	2.58%	0	0.00%	12,099	1,493	312	2.58%	1,493	0		

Pre-Transaction: Dynegy has a tolling agreement for a portion of the output from Independence, ranging from 522 MW to 638 MW (depending on the season).

	w/o imports					
	By Owner	ICAP Share	ННІ			
Dynegy Power Inc.	1,704	7.1%	50			
Sithe Energies Inc.	516	2.1%	5			
New York Power Authority	4,624	<b>19</b> .1%	366			
NRG Power, Inc.	2,935	12.1%	148			
Entergy Nuclear	2,873	11.9%	<b>14</b> 1			
Constellation Power Source	1,823	7.5%	57			
Mirant Corporation	1,669	6.9%	48			
New York State Elec. & Gas Corp.	1,614	6.7%	45			
AES Corp.	1,283	5.3%	28			
National Energy & Gas Trans. Inc.	1,083	4.5%	20			
Other	4,040	16.7%	29			
Imports	-	0.0%				
Total HHI Change Post-Transaction HHI	24,163	100.0%	936 30 966			

# ICAP Market Share and HHI Changes for "Upstate" New York (i.e., Excluding the City and Long Island)

Source: Capacity data (and import capability) from NYISO 2004 Load and Capacity Data. Applicant supply adjusted per contractual commitments.

# Pivotal Supplier Test (Summer 2005)

	NYISO	Upstate
Capacity Owned or Controlled by Sithe (adj. for ICAP sale)	516	516
Native Load Commitments	-	-
Sithe Uncommitted Capacity	516	516
Capacity Owned or Controlled by Dynegy	1,704	1,704
Native Load Commitments	-	-
Dynegy Uncommitted Capacity	1,704	1,704
NYCA Capability	40,947	24,163
Net Purchases (Sales)	(225)	
	40,722	24,163
Load Forecast	32,320	15,800
Emergency Demand Response Program Load	260	129
	32,060	15,671
Required Capability (18% Reserve Margin)	37,831	18,492
Capability in Excess of Reserves	2,891	5,671
Capability in Excess of Reserves, without Applicants	672	3,451
Are Applicants Pivotal Suppliers?	No	No

Source: NYISO 2004 Load and Capacity Data.

# **Ancillary Services in the NYISO**

	10-min Spin 1 1/	0-min Non <sup>,</sup> Spin <sup>1/</sup>	Regulation	30 min Reserves
Ancillary Services Average Capability NYISO <sup>2/</sup> Sithe <sup>3/</sup>	1,750	1,400	1,450	11,000 68
Sine Dynegy Min-Load <sup>4/</sup> Dynegy Mid-Load <sup>4/</sup>	- 98 198	NA NA	- 49 99	294 594
Dynegy Max-Load <sup>4/</sup>	98	NA	49	294
Sithe Share Dynegy Share Min-Load Dynegy Share Mid-Load Dynegy Share Max-Load	0.0% 5.6% 11.3% 5.6%	0.0%	0.0% 3.4% 6.8% 3.4%	0.6% 2.7% 5.4% 2.7%

<sup>1/</sup> Represents Average Capability on the Eastern side of the Central-East Interface only.

<sup>2/</sup> Source: New York ISO State of the Market Report 2003, page 75.

<sup>3/</sup> The only Sithe units currently capable of providing these ancillary services is Ogdensburg. Ogdensburg can also provide 10-minute spin and non-spin, but the unit is located on the Western side of the Central-East interface.

<sup>4/</sup> These figures represent Roseton at "min", "mid" and "max" load, plus Danskammer.





page 2 (