141 FERC ¶ 61,084
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Philip D. Moeller; John R. Norris;
Cheryl A. LaFleur; and Tony T. Clark.

Barclays Bank PLC, Daniel Brin, Scott Connelly, Karen Levine, and Ryan Smith — Docket No. IN08-8-000

ORDER TO SHOW CAUSE AND NOTICE OF PROPOSED PENALTY

(Issued October 31, 2012)

1. Pursuant to Rule 209(a)(2) of the Commission's Rules of Practice and Procedure,[1] the Commission's Revised Policy Statement on Enforcement,[2] and the Commission's Statement of Administrative Policy Regarding the Process for Assessing Civil Penalties,[3] the Commission directs the above-captioned company and individuals to show cause why they should not be found to have violated section 1c.2 of the Commission's regulations and section 222 of the Federal Power Act (FPA).[4] Barclays Bank PLC (Barclays) and Daniel Brin, Scott Connelly, Karen Levine, and Ryan Smith (collectively the individual traders) are alleged to have violated section 1c.2 by manipulating the electricity markets in and around California from November 2006 to December 2008. The Commission directs Barclays to show cause why it should not be assessed a civil penalty in the amount of $435 million, or a modification to that amount consistent with section 31(d)(4) of the FPA,[5] and disgorge $34.9 million plus interest or a modification to that amount as

[1] 18 C.F.R. § 385.209(a)(2) (2012).

[2] *Enforcement of Statutes, Regulations and Orders*, 123 FERC ¶ 61,156, at P 35-36 (2008).

[3] *Process for Assessing Civil Penalties*, 117 FERC ¶ 61,317, at P 5 (2006).

[4] 18 C.F.R. § 1c.2 (2012); 16 U.S.C. § 824v(a) (2006).

[5] We note that under section 31(d)(4) of the FPA, 16 U.S.C. § 823b(d)(4) (2006), the Commission may "compromise, modify, or remit, with or without conditions, any civil penalty which may be imposed . . . at any time prior to a final decision by the court of appeals . . . or by the district court."

warranted.[6] The Commission also directs the individual traders to show cause why they should not be assessed civil penalties of the following amounts or a modification to these amounts consistent with section 31(d)(4) of the FPA: Brin – $1 million, Connelly – $15 million, Levine – $1 million, and Smith – $1 million. Pursuant to Rule 213(a) of the Commission's Rules of Practice and Procedure,[7] the Commission directs Barclays and the individual traders to file answers with the Commission within 30 days of the date of this order. Office of Enforcement Staff (OE staff) may reply to those answers within 30 days of the filing of the answers.

2. This case presents allegations by OE staff of violations of the Commission's Prohibition of Energy Market Manipulation. These allegations arose out of an investigation conducted by OE staff and are described in the Enforcement Staff Report and Recommendation (OE Staff Report).[8] The OE Staff Report alleges that Barclays and the individual traders engaged in a coordinated scheme to manipulate trading at four electricity trading points in the Western United States in certain months from November 2006 to December 2008. Specifically, OE staff alleges that Barclays and the four individual traders violated section 1c.2 in certain months by engaging in loss-generating trading of next-day fixed-price physical electricity on the IntercontinentalExchange at the locations of Mid-Columbia, Palo Verde, South Path 15 and North Path 15 to benefit Barclays' financial swap positions in those markets.

3. Based on the allegations contained in the OE Staff Report, the Commission orders Barclays and the individual traders to respond to this order as set forth above.[9] This order also is the notice of proposed penalty required pursuant to section 31 of the FPA.[10]

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[6] *See* 18 C.F.R. § 385.209(b) (2012).

[7] 18 C.F.R. § 385.213(a) (2012).

[8] The OE Staff Report is attached to this order as Appendix A. The OE Staff Report describes the background of OE staff's investigation, findings and analysis, and recommended sanctions.

[9] Under 18 C.F.R. § 385.213(c) (2012), Barclays and the individual traders must file answers that provide a clear and concise statement regarding any disputed factual issues and any law upon which they rely. They must also, to the extent practicable, admit or deny, specifically and in detail, each material allegation contained in the OE Staff Report and set forth every defense relied upon. Failure to answer an order to show cause will be treated as a general denial and may be a basis for summary disposition under Rule 217. 18 C.F.R. § 385.213(e)(2) (2012).

[10] 16 U.S.C. § 823b(d) (2006).

In the answers to this order, Barclays and the individual traders have the option to choose between either (a) an administrative hearing before an Administrative Law Judge (ALJ) at the Commission prior to the assessment of a penalty under section 31(d)(2), or (b) an immediate penalty assessment by the Commission under section 31(d)(3)(A). If Barclays or the individual traders elect an administrative hearing before an ALJ, the Commission will issue a hearing order; if they elect an immediate penalty assessment, and if the Commission finds a violation, the Commission will issue an order assessing a penalty. If such penalty is not paid within 60 days of assessment, the Commission will commence an action in a United States district court for an order affirming the penalty, in which the district court may review the assessment of the civil penalty *de novo*.[11]

4. The Commission authorizes OE staff to disclose information obtained during the course of the investigation as necessary to advance this matter.

The Commission orders:

(A) Within 30 days of the date of this order, Barclays and the individual traders (collectively Respondents) must file answers in accordance with Rule 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213 (2012), showing cause why they should not be found to have violated 18 C.F.R. § 1c.2 (2012) and 16 U.S.C. § 824v(a) (2006) with respect to their trading of electricity in the Western United States.

(B) Within 30 days of the date of this order, Barclays must file an answer in accordance with Rule 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213 (2012), showing cause why its alleged violation should not warrant the assessment of civil penalties in the amount of $435 million, or a modification of that amount consistent with section 31(d)(4) of the FPA, and require it to disgorge $34.9 million plus interest or a modification to that amount as warranted. Within 30 days of the date of this order, the individual traders must file answers in accordance with Rule 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213 (2012), showing cause why their alleged violations should not warrant the assessment of civil penalties in the amounts of $1 million for Brin, $15 million for Connelly, $1 million for Levine, and $1 million for Smith, or modifications of those amounts consistent with section 31(d)(4) of the FPA.

(C) In their answers, Respondents should address any matter, legal, factual or procedural, that they would urge in the Commission's consideration of this matter.

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[11] FPA section 31(d)(3)(B), 16 U.S.C. § 823b(d)(3)(B) (2006). *See also Process for Assessing Civil Penalties*, *supra* note 3.

(D) Within 30 days of the date of this order, Respondents must also elect (a) an administrative hearing before an ALJ at the Commission or (b) if the Commission finds a violation, an immediate penalty assessment by the Commission which a United States district court is authorized to review *de novo*.

(E) Within 30 days of the filing of the answers by Respondents, Enforcement staff may file a reply with the Commission.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

FEDERAL ENERGY REGULATORY COMMISSION

Barclays Bank PLC, Daniel Brin, Scott Connelly, Karen Levine, and Ryan Smith
Docket No. IN08-8-000

Enforcement Staff Report and Recommendation

Office of Enforcement

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I. EXECUTIVE SUMMARY

The Office of Enforcement (OE) has concluded that Barclays Bank PLC (Barclays) and its individual traders manipulated the electricity markets in and around California from November 2006 to December 2008 in violation of 18 C.F.R. § 1c.2 (2012) (Anti-Manipulation Rule or 1c.2). Accordingly, staff recommends the Commission issue an Order to Show Cause and Notice of Proposed Penalty against Barclays of $435 million civil penalty and disgorgement of $34.9 million plus interest and total civil penalties against the individual traders of $18 million. Staff concludes that Barclays and its four individual traders violated the Anti-Manipulation Rule during certain months in the period from November 2006 to December 2008 (alleged manipulation months) by engaging in loss-generating trading of next-day fixed-price physical electricity on the IntercontinentalExchange (ICE) to benefit Barclays' financial swap positions at the primary electricity trading points in the Western United States: Mid-Columbia, South Path 15, North Path 15, and Palo Verde.

Staff concludes that during the alleged manipulation months Barclays' West power desk engaged in a coordinated scheme to trade next-day fixed-price physical power to move the ICE daily index settlements to benefit Barclays' fixed-for-floating financial swap positions that settled against those indices. Barclays engaged in this activity for 655 product days for 35 monthly products and caused losses to market participants estimated at $139.3 million. In the alleged manipulation months, Barclays generally began by assembling substantial physical index positions in the opposite direction of its fixed-for-floating financial swap positions. Barclays flattened those physical index positions in the next-day fixed-price physical markets in a manner designed to move the daily index settlement up if it was buying and down if it was selling. Barclays' execution of its next-day fixed-price physical trading was highly coordinated and discussed amongst the traders. Barclays' trading of next-day fixed-price physical against index produced substantial, repeated, and avoidable losses in the next-day fixed-price physical markets. Barclays was willing to accept losses in its next-day fixed-price physical trading to move the settlement of daily indices in the direction that benefited its financial swaps.

Barclays used this strategy to manipulate 35 monthly products during the period from November 2006 to December 2008. Staff's investigation uncovered a substantial number of contemporaneous instant messages and e-mails that reveal Barclays' intent to trade next-day fixed-price physical electricity against index to move the respective daily index settlements and enhance the value of its fixed-for-floating financial swaps. The communications demonstrating manipulative intent originate from at least four different traders on the West power desk: Scott Connelly, Managing Director of North American Power; Daniel Brin; Karen Levine; and Ryan Smith. For example, Brin indicated that he was "doing phys[ical] so i [sic] am trying to drive price in fin[ancial] direction" while Smith described how he "fuckked [sic] with the Palo m[a]rk[e]t," "propped up the palo

index," and was "gonna try to crap on the NP light and it should drive the SP light lower." Levine similarly stated that Barclays would trade physical index to "protect a position" and requested her colleagues to "keep the PV index up and the SP daily index down" while she was on vacation. Brin and Smith also discussed how Levine asked them to help her "prop up" indices and explained how doing so required the Barclays traders to take a "daily loss" trading the physical markets. The Barclays traders knew their loss-generating physical trading was likely unlawful and specifically ignored the warning of Joseph Gold, Managing Director and Head of Commodities, Americas, who had made clear the practice was unacceptable:

> Uneconomic trading activity was something which I tried to make sure was very clear to all the traders. It was something that, during training, I would frequently - - that was one of the sessions I was frequently asked to do, the reason being that compliance liked my way of expressing it, which we called the golden rule. The golden rule was always, under no circumstances, lose money on a transaction for the intention of making money on another transaction….[1]

Staff believes that Barclays, Brin, Connelly, Levine, and Smith violated section 222 of the Federal Power Act (FPA), 16 U.S.C. § 824v (2006), and 1c.2. Consistent with the criteria identified in the *Penalty Guidelines*[2] and the *Revised Policy Statement on Enforcement*[3] as discussed in section VI, staff recommends the Commission issue an Order to Show Cause and Notice of Proposed Penalty with the following penalties and disgorgement:

Proposed Penalties and Disgorgement:

Barclays:

- Disgorgement of $34.9 million plus interest
- $435 million civil penalty

[1] Testimony of Joseph Gold (Gold Test.) at 111:9-16.

[2] *Revised Policy Statement on Penalty Guidelines*, 132 FERC ¶ 61,216 (2010) (*Penalty Guidelines*).

[3] *Enforcement of Statutes, Regulations and Orders*, 123 FERC ¶ 61,156 (2008) (*Revised Policy Statement on Enforcement*).

Brin:

- $1 million civil penalty

Connelly:

- $15 million civil penalty

Levine:

- $1 million civil penalty

Smith:

- $1 million civil penalty

II. PROCEDURAL HISTORY

Staff began its investigation after the Enforcement Hotline received calls from market participants. After extensive review of Barclays' data and communications and taking the testimony of a number of current and former employees of Barclays and of third parties, staff issued preliminary conclusions letters to Barclays, Brin, Connelly, Levine, and Smith on June 10, 2011. Barclays and Connelly submitted a joint response on August 29, 2011. Connelly submitted an additional separate response the same day. Brin also responded on August 29, 2011. Levine and Smith submitted their responses on August 30, 2011. Staff extensively analyzed the subjects' responses individually and collectively and determined that its preliminary conclusions had not materially changed. Staff issued Notices of Alleged Violation on April 5, 2012. After settlement discussions proved unproductive, staff on May 3, 2012 issued notices, under 18 C.F.R. § 1b.19 (2012) (1b.19), of intent to recommend that the Commission initiate a public proceeding against the subjects. The subjects filed 1b.19 responses on June 11, 2012. Staff has carefully considered the subjects' 1b.19 responses and recommends the issuance of an Order to Show Cause and Notice of Proposed Penalty attaching this report.

III. BACKGROUND

A. The Barclays West Power Desk

Barclays is a publicly traded global financial services provider headquartered in London, England, with retail and commercial banking, wealth management, credit cards, and investment banking arms. Barclays employs approximately 140,000 persons

globally[4] and has its North American headquarters in New York City. During the relevant time period, Barclays was a major participant in the Western U.S. power markets. During the relevant trade sessions during the alleged manipulation months, Barclays' total market concentration of next-day fixed-price physical trading ICE volumes was a maximum of 58%, and a minimum of 10%, of a month's trading.[5] Barclays' trades constituted 24% of the total next-day fixed-price trading across the alleged manipulation months.[6]

In May 2006, Barclays[7] hired Scott Connelly as its Managing Director of North American Power to build and grow a North American power trading group for Barclays.[8] Connelly reported directly to Gold.[9] Connelly recommended Gold hire three of Connelly's former colleagues from Mirant Corporation (Mirant): Ryan Smith, Karen Levine, and Monal Dhabliwala[10] and was instrumental in recruiting these individuals to

[4] Barclays, http://www.barcap.com/about-barclays-capital/our-firm/our-firm.html (last visited October 31, 2012).

[5] *See* Aug. 27, 2007 Data Provided in Response to Staff's July 27, 2007 Data Request Nos. 1 and 2, BARC000637-655; Feb. 5, 2009 Data Provided in Response to Staff's Jan. 8, 2009 Data Request Nos. 1 and 2, BARC088309; Mar. 3, 2009 Data Provided in Response to Staff's Jan. 8, 2009 Data Request Nos. 1 and 2, BARC088310 (collectively Barclays Trading Data); Feb. 24, 2009 and March 17, 2009 Data Provided by ICE in Response to Staff's Jan. 21, 2009 Subpoena *Duces Tecum* Requests Nos. 1-1 and 1-2 (ICE Data).

[6] *Supra* note 5.

[7] Staff refers to Barclays Bank PLC and its investment banking division, formerly known as Barclays Capital, collectively as "Barclays." All the activities discussed in this memorandum occurred in the Barclays Capital division. In 2012, Barclays rebranded Barclays Capital to be simply Barclays. Michael J. de la Merced, *Barclays Sheds 'Capital' from its Investment Banking Name*, N.Y. Times Dealbook, March 20, 2012, http://dealbook.nytimes.com/2012/03/20/barclays-sheds-capital-from-its-investment-banks-name/.

[8] Testimony of Scott Connelly (Connelly Test.) at 97:16-99:24; Gold Test. at 42:9-10, 48:2-8.

[9] Connelly Test. at 99:25-100:6; Gold Test. at 48:2-8.

[10] Gold Test. at 127:15-129:1.

join Barclays.[11] In fact, Gold cannot recall Barclays rejecting anyone that he interviewed and Connelly recommended for employment.[12] After Connelly joined Barclays, he hired Daniel Brin, a trader Connelly knew from Mirant; Michael Gerome, who had worked as Connelly's trading clerk at Sempra Energy Trading (Sempra); and Jeff French.[13] Connelly, Brin, Levine, Smith, Dhabliwala, Gerome, and French were the traders who comprised Barclays' West power desk responsible for trading Western U.S. electricity.[14] In addition to being Managing Director of North American Power, Connelly personally headed the West power desk trading, and the West power desk traders all reported to Connelly.[15]

Brin, Levine, and Smith were the physical cash traders on the desk.[16] A physical cash trader generally is responsible for trading the period from the next-day through the end of the month or into the prompt month[17] depending on circumstances.[18] Connelly and Dhabliwala were the term traders on the desk.[19] A term trader generally is

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[11] Testimony of Monal Dhabliwala (Dhabliwala Test.) at 50:16-52:14, 55:21-56:1; Testimony of Karen Levine (Levine Test.) at 50:6-9; Testimony of Ryan Smith (Smith Test.) at 112:20-113:18.

[12] Gold Test. at 134:2-4.

[13] Testimony of Daniel Brin (Brin Test.) at 41:10-13, 42:12-13; Connelly Test. at 100:9-101:12; Testimony of Michael Gerome (Gerome Test.) at 24:23-25:6.

[14] Gerome Test. at 58:17-21. Gerome noted in his testimony that Blake Schaffer was also a member of the West power desk. Schaffer was hired from Lehman Brothers. Connelly Test. at 105:15-18.

[15] Connelly Test. at 123:2-21.

[16] Brin Test. at 43:4-22, 97:17-20, 119:19-21; Connelly Test. at 101:6-9, 444:22-445:8, 500:20-24, 526:20-527:1; Smith Test. at 131:24-132:23. Staff notes that Brin initially started as an analyst but was promoted to a cash trader with his own trading book upon Smith's departure. However, during the period Brin held the role of analyst, he still traded next-day fixed-price physical electricity on behalf of others on the desk. Brin Test. at 43:9-44:3, 67:6-22.

[17] The prompt month refers to the month that follows the current month. *See* Levine Test. at 144:23-25.

[18] Connelly Test. at 444:22-445:8.

[19] Connelly Test. at 466:24-467:14, 547:22-548:1, 560:13-15, 561:23; Dhabliwala Test. at 66:14-19.

responsible for trading the prompt month through periods extending out the forward curve.[20] Gerome traded energy options.[21] French primarily traded Canadian power[22] and hence his trading activities have not been a focus of staff's investigation.

B. The Relevant Western United States Electricity Markets

1. The Physical Markets

The Barclays West power desk traded both term and shorter-dated physical markets in the Western U.S. The physical and financial products relevant to this investigation are specific and standardized products with characteristics known to market participants. For the purposes of staff's investigation of Barclays' Western U.S. trading from November 2006 to December 2008, the most relevant physical markets are next-day fixed-price and index power. For both physical and financial electricity, there are peak and off-peak products. The peak market is Monday through Saturday for hours ending in 7 to 22 but excluding holidays.[23] The off-peak market is all of Sunday, Monday through Saturday for hours ending in 23, 24, 1 to 6, and all holidays.[24]

a. Dailies

Next-day or day-ahead fixed-price physical electricity (cash or dailies) is physical electricity transacted at a specified fixed-price that will be delivered or received at a specific trading location generally on the following day.[25] There are separate cash trading markets for peak and off-peak physical electricity, and delivery occurs equally in megawatts per hour (MW/h) for the contract period. Cash trading on Thursdays is done as a combination, usually called a "package," with an off-peak and a peak package for Friday and Saturday.[26] Similarly, cash trading on Fridays has peak and off-peak

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[20] The forward curve is comprised of future time periods with associated prices. *See* Connelly Test. at 466:24-467:14; Dhabliwala Test. at 63:11-64:2.

[21] Connelly Test. at 100:19-22; Gerome Test. at 60:23-61:5.

[22] *See* Connelly Test. at 101:23-25, 106:21-22.

[23] Levine Test. at 10:23-11:7.

[24] *Id.*

[25] *See* Brin Test. at 16:16-19; Levine Test. at 9:17-21.

[26] *See* Barclays Trading Data.

packages for Sunday and Monday.[27] Cash trading around a holiday will also occur as a package containing two off-peak days.[28] Barclays concentrated the majority of its cash trading on ICE, an electronic exchange platform.[29] A standard trading block on ICE consists of 25 MW/h delivered equally over the peak hours for peak electricity or over the off-peak hours for off-peak electricity.[30]

b. Index

Physical power at index is physical electricity transacted at a price determined by a methodology that calculates the volume weighted average price (VWAP) of all contributing volumes and prices.[31] The determined or calculated index price, relevant to this investigation, was derived from transactions taking place on ICE in the cash markets.[32] Although physical at index can consist of a number of different time periods (known as "tenors"), the types of physical at index most relevant to this investigation are daily index, balance of the month (BOM) index, and monthly index. Daily index is physical electricity transacted at the VWAP of all next-day transactions for a given day on ICE.[33] The VWAP derived from the transactions on ICE is known as the "ICE daily index price," "daily index," or simply the "index."[34] Physical BOM index is a transaction for physical daily index electricity for each of the remaining days in a given

[27] *Id*. The peak package for Sunday and Monday actually only consists of peak hours on Monday because all hours Sunday are off-peak, and the off-peak package for Sunday and Monday contains all of Sunday and the off-peak hours for Monday.

[28] Smith Test. at 52:22-53:4.

[29] *See* Barclays Trading Data.

[30] *See* Connelly Test. at 622:8-10.

[31] Brin Test. at 16:20-22; Connelly Test. at 444:14-21; Levine Test. at 9:8-10; Smith Test. at 12:18-21.

[32] *Supra* note 31.

[33] *See supra* note 31.

[34] *Supra* note 31.

month.[35] Physical monthly index is a transaction for physical daily index electricity for each of the days of a given month.[36]

Each physical index is tied to a specific physical location and designated peak or off-peak depending on the trading period it represents. For example, a peak index for a day will consist of the VWAP of the peak trading on ICE in the dailies that occurred during that day's trading period. Similarly, the off-peak index for that day will consist of the VWAP of the off-peak trading on ICE in the dailies that occurred during that day's trading period.

c. The Relevant Trading Locations

Barclays' Western power trading during the alleged manipulation months focused on four trading locations: Mid-Columbia (MIDC), Palo-Verde (PV), South Path 15 (SP), and North Path 15 (NP). MIDC is a trading location in Washington located around hydroelectric facilities in the Columbia River Basin.[37] Palo Verde is a trading location in Arizona that has a substantial amount of nuclear generation.[38] NP is a trading zone that encompasses most of northern California, and SP is a trading zone that encompasses most of southern California.[39] These locations were the most liquid trading points in the Western U.S. during the period in question.[40]

2. The Financial Markets

Although Barclays' West power desk traders traded a number of financial electricity products, the product most relevant to staff's investigation is the fixed-for-floating financial swap (financial swap). A financial swap contains no obligation to deliver or receive physical electricity and settles by an exchange of payments.[41] The buyer of the fixed-for-floating financial swap pays a fixed-price and receives a floating

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[35] *See* Connelly Test. at 775:5-14; Dhabliwala Test. at 19:5-7; Smith Test. at 53:11-21.

[36] *See* Levine Test. at 9:1-7, 144:21-145:4.

[37] Connelly Test. at 484:1-23.

[38] Brin Test. at 55:17-22; Smith Test. at 402:8-18.

[39] Connelly Test. at 91:20-22; Levine Test. at 243:1-3.

[40] Connelly Test. at 259:19-23; Levine Test. at 270:6-18; Smith Test. at 348:11-349:1.

[41] Connelly Test. at 75:5-11; Smith Test. at 13:14-19.

price consisting of the ICE daily index for each day of the swap's duration.[42] The seller receives the fixed-price and pays the floating price.[43]

Like physical index products discussed above, financial swaps come in different tenors. The most relevant for staff's investigation are daily, BOM, monthly, quarterly, and yearly financial swaps. A daily financial swap is the exchange of a fixed-price for the daily index on a single day. A BOM financial swap is the exchange of a fixed-price for the daily index for each of the remaining days in a given month.[44] A monthly financial swap is the exchange of a fixed-price for the daily index each day of an entire month.[45] In the same manner, financial swaps can also be traded for entire quarters or calendar years.[46] Like the physical markets, financial swaps are tied to specific trading locations and are designated peak or off-peak.

A net buyer of the fixed-for-floating financial swap is said to be "long" the financial swap while a net seller of the swap is said to be "short" the financial swap.[47] A "net" position is the position that results after combining long and short positions. For example, a trader may be long 75 MW/h of monthly MIDC peak swaps and short 25 MW/h of monthly MIDC peak swaps, a situation which results in a net long position of 50 MW/h of monthly MIDC peak swaps. By way of illustration, if Barclays held a net long position in a monthly financial MIDC peak swap, it would pay a fixed-price and receive the ICE daily index settlement each delivery day of the month with peak electricity. A long position in the financial swap benefits from a higher daily index because the daily floating payment the buyer receives is higher relative to the fixed-price at which the buyer purchased the financial swap.[48] Conversely, a short position in the financial swap benefits from a lower daily index because the floating price the seller must pay is lower relative to the fixed-price the seller receives.[49] These products are marked-

[42] Brin Test. at 14:11-15:5; Connelly Test. at 443:10-444:21; Dhabliwala Test. at 17:9-17; Levine Test. at 8:15-18; Smith Test. at 9:7-18, 13:11-19.

[43] *See supra* note 42.

[44] *See* Connelly Test. at 775:5-14; Smith Test. at 53:11-21.

[45] *See* Levine Test. at 277:1-5, 285:15-286:1.

[46] *Id.*; Connelly Test. at 470:7-14, 645:16-22.

[47] Brin Test. at 17:3-18; Connelly Test. at 443:14-17; Levine Test. at 8:15-21; Smith Test. at 9:7-18.

[48] *See* Brin Test. at 18:3-13; Dhabliwala Test. at 18:19-25; Levine Test. at 9:11-13; Smith Test. at 14:5-8.

to-market daily.[50] Traders also use the terms long and short in the physical markets discussed *supra* at 6-8 to mean having bought more physical power than sold at a location (long) or having sold more physical power than purchased at a location (short).[51]

Market participants frequently trade the difference, known as a "spread," between two locations by using a combination of financial swaps.[52] This is done by taking a net long position in the financial swap at one location and a net short position in the financial swap at the other location. Each location is known as a "leg" of the spread.[53] Generally, the trading zones in California have higher prices than the locations outside California in the Western U.S., and power generally flows from PV and Northwestern states to the California zones.[54] The location with a higher price is called the "premium" market in relation to the lower priced location. A trader is "long" the spread when he or she has a net long position in the premium market's financial swap and a net short position in the financial swap in the other leg of the spread.[55] If a trader has a net short position in the premium market financial swap and a net long position in the other leg's financial swap, he or she is "short" the spread.[56] For example, if a trader took a net long financial swap position at PV and a net short financial swap position at SP, the trader would be short the SP to PV[57] spread because SP usually trades at a premium to PV.

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[49] *Supra* note 48.

[50] *See* Brin Test. at 51:7-11, 180:9-15; Connelly Test. at 812:5-11. Marked-to-market positions are revalued to reflect the current market price rather than book value.

[51] *See* Connelly Test. at 304:15-21.

[52] *See* Brin Test. at 15:11-17, 16:10-14; Connelly Test. at 89:25-90:21, 335:2-14; Smith Test. at 17:23-18:3, 167:5-23.

[53] *See* Levine Test. at 87:16-18, 111:2-7.

[54] Davis W. Edwards, Energy Trading & Investing 114-15 (2010).

[55] *See* Levine Test. at 333:4-334:9.

[56] *Id*.

[57] The relationship between the two locations is frequently expressed with the premium location first and separated by a "/" from the other leg of the spread. For example the spread between SP and PV would be expressed as "SP/PV."

IV. SUMMARY OF FACTUAL FINDINGS

Staff finds that during the alleged manipulation months, Barclays traded dailies against index to move the resulting daily index settlements to benefit its financial swap positions in violation of section 1c.2 of the Commission's rules. In each alleged manipulation month, staff finds that Barclays manipulated cash trading and the resulting daily index settlements.

As a hypothetical example of the type of behavior engaged in by Barclays, assume Barclays established a long peak monthly financial swap position for 1000 MW/h at $52 per MW/h. The financial swap settles against the daily index each day of the month. Barclays then establishes a short 1000 MW/h position in physical monthly index. Barclays proceeds to liquidate its short index position by buying dailies each day of the month. Assume that on the first trading day of the month, Barclays' cash trades have a VWAP of $60 per MW/h. Other market participants trade at a lower price than Barclays, and the daily index settles at $57 per MW/h. Assume that if Barclays had not traded on this day, the daily index settlement would have been $50 per MW/h.

In this hypothetical, Barclays will lose $3 per MW/h on its cash trading [$57 per MW/h (daily index settlement) – $60 per MW/h (VWAP of Barclays' dailies)] but will make $7 per MW/h on its financial swap position [$57 per MW/h (daily index settlement) – $50 per MW/h (daily index settlement absent Barclays' manipulation)]. When compared to the price at which Barclays established its financial swaps, its total profit would be $2 per MW/h [$57 per MW/h (daily index settlement received for financial swaps) – $3 per MW/h (loss in dailies against index trading) – $52 per MW/h (initial price paid for financial swaps)]. If Barclays had let the financial swap settle without trading dailies against index to move the settlement, it would have lost $2 per MW/h [$52 per MW/h (initial price paid for financial swaps) – $50 per MW/h (daily index settlement in the absence of Barclays' manipulation)]. The total benefit to Barclays would be $4 per MW/h [$2 per MW/h (profit by subtracting settlement price from establishment price and cash trading losses) + $2 per MW/h (losses that it would have incurred absent manipulation)] or $64,000 [$4 per MW/h gain to financial swaps from manipulation × 16 peak hours/day × 1000 MW/h (financial swap position)].

Staff now summarizes its findings:

A. In the alleged manipulation months, Barclays established significant financial swap positions at one or more of the trading locations of MIDC, PV, SP, and NP, the value and profitability of which were derived from the settlement of the ICE daily indices at each location. Barclays also traded dailies in the alleged manipulation months.

B. Barclays established significant physical positions in the alleged manipulation months. These physical positions generally consisted of

monthly physical at index but also included some fixed-price term positions. The term physical volumes were not generally as significant as the index positions. As the physical position went to delivery each day, Barclays treated its physical fixed-price and physical index positions as interchangeable. The physical positions that Barclays established were generally in the opposite direction of its financial swap positions. Barclays did not control generation or serve load and hence needed to liquidate or flatten its physical position with counterparties each day. Barclays often increased its long or short monthly physical positions by transacting in daily index or BOM index. On some occasions Barclays reversed a monthly physical position that was in the same direction of its financial swap by using daily index or BOM physical to make its physical position opposite to its financial swap.

C. Barclays' West power desk coordinated its cash trading. The desk held morning discussions where the traders aggregated daily physical trading and allocated the cash trading locations to the traders.

D. In the alleged manipulation months, Barclays demonstrated a pattern of flattening its physical positions through the cash market in the direction of its financial swaps. Barclays' cash trading was not intended to get the best price on those transactions and was not in response to supply and demand fundamentals in the market. Barclays flattened its physical positions in a manner to push cash prices up if it was buying dailies and to drive them down if it was selling dailies.

E. Barclays' flattening of physical positions through cash trading in the alleged manipulation months generally produced significant losses. The cash trading activity, however, resulted in gains to Barclays' financial swap positions.

Staff will now discuss these findings in more detail.

A. Barclays Built Financial Swap Positions

Staff finds that Barclays built financial swap positions in the alleged manipulation months. Table 1 lists the alleged manipulation months and associated products and locations that pertain to the alleged manipulation of cash trading and the daily index settlements. In the alleged manipulation months, Barclays exhibited a consistent pattern of setting up financial swap positions and using its cash trading to apply buying or selling pressure in the same direction of those financial swap positions. Staff will address how Barclays used its loss-generating cash trading to move the value of the daily index settlements to benefit its financial swaps *infra* at 23-35.[58]

In the columns under the heading "Price Risk," Table 1 summarizes Barclays' net long or short financial swap exposure. As financial swaps can be put on for different tenors, Table 1 provides the maximum, minimum, and simple average financial exposure Barclays had in the alleged manipulation months by MW/h, indicating long exposures with positive numbers and short exposures with negative numbers.

The Price Risk columns reflect Barclays' financial swap position adjusted for any offsetting or additive physical fixed-price position. For example, if Barclays were long 1000 MW/h the MIDC monthly peak financial swap and also had a physical fixed-price term short position of 500 MW/h at MIDC for the same month, staff would reduce the financial swap fixed-price risk position by the term physical fixed-price risk position to calculate a combined fixed-price exposure of long 500 MW/h for that particular month. For clarity, because the majority of Barclays' financial price exposure consisted of its financial swap positions and Connelly testified that he considered physical fixed-price term positions as having a financial swap and index component,[59] staff refers to Barclays' financial price risk exposure as its "financial swap" position. The column under Price Risk labeled "Days Benefitting" shows the number of days in the alleged manipulation month that Barclays held price risk that benefited from the manipulation.

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[58] The source of Table 1 is the Barclays Trading Data. In a few alleged manipulation months, Barclays' pattern of using its cash trading to trade in the direction of its financial swap position is more nuanced. For NP off-peak December 2006, staff has concluded that Barclays manipulated six delivery days in the month for the reasons discussed *infra* at 27. Similarly, as discussed *infra* at 27-28, staff has concluded that Barclays manipulated MIDC off-peak in March 2007 for twelve trading sessions. Barclays' cash trading in PV peak for January 2007 and SP peak for February and March 2007 also does not encompass all the trade sessions in those months for reasons discussed *infra* at note 60. For the other alleged manipulation months, Barclays' trading behavior across each month exhibited a pattern of manipulation of cash trading and the resulting daily index settlements.

[59] *See* Connelly Test. at 293:14-296:9. *See also* Dhabliwala Test. at 28:20-31:6.

In the columns under the heading "Net ICE," Table 1 shows Barclays' net ICE cash trading in the alleged manipulation months. The net trading takes account of purchases and sales by Barclays in the ICE cash markets to determine the resulting overall direction of Barclays' cash trading. For example, if Barclays sold 1600 MW/h of SP peak power during cash trading and purchased 50 MW/h, its net ICE cash trading would be -1550 MW/h for that day. For each alleged manipulation month, Table 1 presents the maximum, minimum, and simple average cash trading by Barclays in MW/h. The column under Net ICE labeled "Trade Sessions" shows the number of trading days in the alleged manipulation month that Barclays traded dailies.[60] Staff will discuss how Barclays traded dailies on ICE in the direction of its financial swap position *infra* at 23-28.

As an illustration, in the seventh alleged manipulation month listed in Table 1, MIDC peak March 2007, Barclays had a maximum financial swap price risk of 2600 MW/h long during the month, a minimum financial swap price risk of 2000 MW/h long during the month, and a simple average financial swap price risk of 2206 MW/h long during the month. It held financial swap price risk for 27 days this month. Barclays' net ICE cash trading volume for MIDC peak March 2007 had a maximum volume of 2400 MW/h of purchases during the month, a minimum volume of 825 MW/h of purchases during the month, and an average of 1852 MW/h of purchases during the month. Barclays traded dailies for 22 trading sessions this month. Barclays' cash trading in the 22 trade sessions benefitted its financial swap price risk exposure on 27 days this month because some trade sessions were packages for multiple calendar days as discussed *supra* at 6-7.

[60] For some of the possible trading sessions during a month, Barclays did not have a physical position coming into the day, so staff excluded these 38 days from its calculations. Barclays' lack of a physical position coming into the day suggests that Barclays did not set up the scheme for these trading sessions. The one exception to this method used by staff is for NP off-peak trading for December 2006, a month where Smith, who seems to have acquired daily physical volumes in the off-ICE broker market for those days rather than having a built physical position at the start of the day, discusses his implementation of the scheme as explained *infra* at 41-43.

TABLE 1
BARCLAYS' FINANCIAL PRICE RISK AND ICE CASH TRADING IN THE ALLEGED MANIPULATION MONTHS

					Price Risk (MW/h)			*Days Benefitting*	*Net ICE (MW/h)*			*Trade Sessions*
	Product	*Location*	*Year*	*Month*	*Max*	*Avg*	*Min*		*Max*	*Avg*	*Min*	
1	OffPeak	MIDC	2007	3	425	371	325	17	725	331	150	12
2	OffPeak	MIDC	2007	4	625	615	575	25	1000	378	50	17
3	OffPeak	MIDC	2007	5	1000	978	900	31	625	432	275	22
4	OffPeak	MIDC	2007	6	1600	1527	1225	30	1300	1256	1200	21
5	OffPeak	MIDC	2008	6	-890	-565	-415	30	-725	-651	-525	21
6	OffPeak	NP	2006	12	-650	-633	-600	6	-225	-175	-75	3
7	Peak	MIDC	2007	3	2600	2206	2000	27	2400	1852	825	22
8	Peak	MIDC	2007	4	1685	1521	1435	23	1175	566	275	19
9	Peak	MIDC	2007	6	-4150	-3615	-2900	26	-1575	-855	-325	21
10	Peak	MIDC	2008	5	-7181	-5466	-3181	26	-1500	-579	-50	20
11	Peak	MIDC	2008	6	-8056	-5008	-3331	25	-2025	-1217	-875	21
12	Peak	MIDC	2008	8	2094	1118	394	26	775	595	150	20
13	Peak	NP	2007	4	1725	1662	1500	25	1375	980	425	20
14	Peak	NP	2007	5	1650	1650	1650	26	1675	1264	525	21
15	Peak	NP	2007	6	5700	5679	5600	26	1750	1515	375	21
16	Peak	PV	2006	11	625	569	525	25	350	189	50	19
17	Peak	PV	2007	1	1000	766	450	20	1300	237	25	17
18	Peak	PV	2007	2	900	862	825	13	600	368	50	10
19	Peak	PV	2007	4	850	791	750	25	675	353	125	20
20	Peak	PV	2007	5	1275	1255	1225	26	325	185	100	21
21	Peak	PV	2007	7	1100	1083	1025	25	1525	1360	1025	21
22	Peak	PV	2007	8	2024	2019	1999	27	1125	898	575	22
23	Peak	PV	2007	9	850	774	475	24	375	250	100	19
24	Peak	PV	2007	10	2325	2124	1625	27	650	340	75	23
25	Peak	PV	2007	11	1550	1537	1475	25	650	360	0	17
26	Peak	PV	2007	12	2800	2729	2400	25	875	655	375	20
27	Peak	PV	2008	1	1275	1008	800	26	700	369	-50	20
28	Peak	PV	2008	2	1250	1203	1125	25	575	436	300	19
29	Peak	PV	2008	3	1500	1490	1475	26	425	296	150	20
30	Peak	PV	2008	4	1475	1451	1400	26	675	517	100	22
31	Peak	PV	2008	5	750	614	525	26	550	271	-100	20
32	Peak	PV	2008	12	1500	1066	325	26	525	456	350	20
33	Peak	SP	2007	2	-1206	-1043	-856	15	-1450	-700	150	12
34	Peak	SP	2007	3	-3481	-3293	-3106	8	-1300	-753	-225	8
35	Peak	SP	2007	5	-1523	-1241	-1048	26	-725	-563	-50	21

B. Barclays Built Physical Positions

Staff finds that Barclays built significant physical index positions in the alleged manipulation months that were in the opposite direction of its financial swap positions.[61] For example, if Barclays was long the monthly MIDC peak financial swap, it would generally take a short physical position in monthly index coming into the month. If Barclays was short the financial swap, it would generally take a long physical monthly index position. Index was a good instrument for the type of manipulation Barclays pursued because it was a liquid product that could be obtained in sizable quantities at a low cost, and as discussed *infra* at 34-35, trading it against dailies carried limited risk. As discussed *infra* at 23-28, Barclays used physical index positions to create the physical obligation that Barclays then flattened with its manipulative cash trading.

Table 2 shows Barclays' built physical positions which were put on through both physical at index and term fixed-price physical volumes.[62] Connelly and other Barclays' traders viewed the physical obligation created by a fixed-price term position going to delivery each day as interchangeable with that of a physical index obligation.[63] Physical index volumes were generally more significant than term fixed-price volumes in determining the physical position that Barclays built in the alleged manipulation months[64] and hence staff generally refers to the flattening of Barclays' physical position as trading cash against index. In Table 2, the "Start of the Month Position" column provides Barclays' built physical position at the beginning of the month. Staff derived the start of the month built physical position by adjusting Barclays' monthly and term physical at index position at the start of the month for any offsetting or additive fixed-price physical monthly and term positions in the same method discussed *supra* at 13. Therefore, staff refers to this starting position as Barclays' "monthly built physical" position. A positive number denotes a long monthly built physical position in MW/h, and a negative number denotes a short monthly built physical position in MW/h. The columns labeled "Daily Position Change" demonstrate how Barclays adjusted its physical position over the course of the month. Because Barclays would transact different volumes in the individual days of the alleged manipulation months, Table 2 presents the maximum, minimum and simple average of daily and BOM index and fixed-price index transactions in the alleged manipulation months.[65] The "Days Position Changed" column

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[61] *See* Barclays Trading Data.

[62] The source of Table 2 is the Barclays Trading Data.

[63] *See supra* note 59.

[64] Barclays Trading Data.

lists the number of days in the month where Barclays altered its start of the month physical obligation using daily index or BOM transactions.

As an illustration, in the first month in Table 2, MIDC off-peak March 2007, Barclays had a monthly physical position of long 175 MW/h at the start of the month. On seventeen days during the period of interest during this month as discussed *infra* at 25-28, Barclays used daily and BOM physical positions to flip its long monthly physical position into a net short physical position. This enabled Barclays to buy back power in the ICE cash market to benefit its long financial swap position. On the day of interest with the largest change to its position, Barclays adjusted its long monthly physical position with net sales of 925 MW/h resulting in a short physical position of 750 MW/h (175 MW/h - 925 MW/h), a position which it bought back on ICE to move the daily index settlement upwards to benefit its long financial swap position.

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65 Staff has not included next-day fixed-price transactions that occurred through the broker market rather than on ICE because these transactions do not contain time stamps and hence it is impractical to determine whether they occurred before or after ICE cash trading on a given date. If they occurred before, they would be included in that day's trading session whereas if they occurred after, they would be included in the following day.

TABLE 2
BARCLAYS' BUILT MONTHLY AND INTRA-MONTH PHYSICAL POSITIONS FOR THE ALLEGED MANIPULATION MONTHS

	Product	*Location*	*Year*	*Month*	*Start of Month Position*	*Daily Position Change (MW/h)*			*Days Position Changed*
						Max	*Avg*	*Min*	
1	OffPeak	MIDC	2007	3	175	-925	-557	-325	17
2	OffPeak	MIDC	2007	4	225	-1150	-622	-275	25
3	OffPeak	MIDC	2007	5	-525	-100	43	50	20
4	OffPeak	MIDC	2007	6	-1300	-25	58	75	12
5	OffPeak	MIDC	2008	6	600	100	86	50	25
6	OffPeak	NP	2006	12	-575	575	433	300	6
7	Peak	MIDC	2007	3	-1100	-1350	-786	50	27
8	Peak	MIDC	2007	4	-300	-950	-320	25	19
9	Peak	MIDC	2007	6	800	575	-1	-425	25
10	Peak	MIDC	2008	5	375	825	261	-275	22
11	Peak	MIDC	2008	6	1150	875	141	-675	8
12	Peak	MIDC	2008	8	-575	-200	-4	425	24
13	Peak	NP	2007	4	-825	-550	-209	-50	25
14	Peak	NP	2007	5	-1675	-300	-300	-300	1
15	Peak	NP	2007	6	-1750	0	0	0	0
16	Peak	PV	2006	11	-25	-375	-186	-50	24
17	Peak	PV	2007	1	-75	-775	-204	50	13
18	Peak	PV	2007	2	150	-675	-506	-175	13
19	Peak	PV	2007	4	-225	-450	-164	-25	25
20	Peak	PV	2007	5	-50	-300	-160	-100	26
21	Peak	PV	2007	7	-1525	25	157	525	24
22	Peak	PV	2007	8	-1251	25	351	725	27
23	Peak	PV	2007	9	-225	-125	-8	125	15
24	Peak	PV	2007	10	-475	-25	132	400	25
25	Peak	PV	2007	11	-550	-25	122	500	24
26	Peak	PV	2007	12	-575	-300	-167	50	9
27	Peak	PV	2008	1	-800	25	242	625	19
28	Peak	PV	2008	2	-825	25	113	275	19
29	Peak	PV	2008	3	-575	-100	-45	100	10
30	Peak	PV	2008	4	-900	-25	85	300	22
31	Peak	PV	2008	5	-700	-200	124	550	24
32	Peak	PV	2008	12	-525	25	34	125	11
33	Peak	SP	2007	2	-875	2300	1468	975	15
34	Peak	SP	2007	3	-375	1175	638	425	8
35	Peak	SP	2007	5	275	400	314	-125	25

In a number of the alleged manipulation months, Barclays used daily or BOM physical transactions to add to the size of its monthly physical position. For example, in MIDC peak March 2007, Barclays started the month with a short 1100 MW/h monthly built physical position and added to that short position by selling an additional average of 786 MW/h of daily index or BOM physical. This resulted in Barclays having a total average short position in the month of 1886 MW/h (1100 MW/h + 786 MW/h). This activity added significantly to Barclays' daily obligation to flatten its physical position by trading dailies. Because Barclays did not control generation or serve load, it had to flatten its physical obligations each day as they went to delivery.[66] "Flattening" refers to the process by which Barclays' physical purchases and sales at various trading locations had to offset each other exactly.[67] By increasing its long or short monthly physical position through daily index or BOM physical, Barclays created a larger position to be flattened in the dailies.

Barclays' intra-month daily index and BOM physical transactions constituted systematic efforts to build its cash trading volume in a number of the alleged manipulation months. For example, Smith repeatedly bought large volumes of SP peak daily-index power in February and March 2007 and stated repeatedly in his communications that he was willing to buy "all" the daily index that sellers had available.[68] When questioning what another market participant was doing in an instant message with one of his index brokers, Smith revealed that his plan in March 2007 was to buy all the SP daily index available every day:

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[66] Connelly Test. at 292:15-21, 301:19-21, 304:12-17, 396:11-13, 473:4-16.

[67] *See id.* at 303:25-304:6.

[68] Instant Message (IM) between R. Smith and C. Martin, Feb. 1, 2007, BARC0263058 ("seriously, looking for another 1,000 / SP hvy / just line up the offers"); IM between R. Smith and E. Hunzeker, Feb. 7, 2007, BARC0263283 ("I'll take as much SP index as you have"); E-mail from R. Smith to E. Hunzeker and C. Crowell, Feb. 28, 2007, BARC0242733 ("If you're selling. I'll buy it all."); IM between R. Smith and C. Brown, Mar. 6, 2007, BARC0254334-35 ("flat bid early daily SP hvy. / prefer vo[l]ume"); IM between R. Smith and C. Brown, Mar. 8, 2007, BARC0254395-96 ("flat bid for volume … as much as you have"); IM between R. Smith and C. Martin, Mar. 12, 2007, BARC0254502-03 ("I'll take as much as you get"); IM between R. Smith and R. Sweeney, Mar. 12, 2007, BARC0254504-05 ("I'll take as much as you get"). "Heavy" or "hvy" is another means of referring to peak electricity. *See* Levine Test. at 10:23-11:7.

AIM:icapkbrown (11:55:07 AM): Notice: All instant messages sent to and from this buddy name will be logged by the IMAuditor and are subject to archival, monitoring, or review and/or disclosure to someone other than the recipient.

AIM:icapkbrown (11:55:07 AM): whats up with htis bom so index?

AIM:icapkbrown (11:55:11 AM): this

AIM:smittybarcap (11:55:18 AM): no clue

AIM:smittybarcap (11:55:26 AM): what's trading .10's?

AIM:icapkbrown (11:55:34 AM): im .10 bid

AIM:smittybarcap (11:55:39 AM): MS?

AIM:icapkbrown (11:55:48 AM): jp

AIM:smittybarcap (11:55:56 AM): no idea

AIM:smittybarcap (11:56:33 AM): unless he's trying to buy up all the index from people, so we can't do it ona daily basis

AIM:icapkbrown (11:57:42 AM): maybe

AIM:icapkbrown (11:59:20 AM): may sp/np 1 @ 1.25 now

IM between R. Smith and C. Brown, Mar. 13, 2007, BARC0254596-97.[69]

Brin was also buying SP daily index during March 2007.[70] Moreover, Brin was following a pattern similar to Smith's by repeatedly selling large volumes of daily and BOM index for MIDC peak power in March 2007.[71] These sales of MIDC peak BOM

[69] The reference to "so index" in the first line appears to be a reference to SP index. At 11:55:34 AM, Smith refers to the market as "trading .10's." Index markets are often quoted or traded at a premium or discount to index. An index market trading ".10's" would be trading at index plus $.10, and a bid of ".10" would be an offer to buy at index plus $.10. *See* Brin Test. at 241:1-7, 305:5-11. "MS" refers to Morgan Stanley. Smith Test. at 346:13-16. "[J]p" refers to J.P. Morgan. *See id.* at 339:7-10. Smith's IM name is "smittybarcap."

[70] IM between C. Brown and D. Brin, Mar. 14, 2007, BARC0636736-37.

[71] IM between D. Brin and Scott from Landmark, Mar. 2, 2007, BARC0636426-27; IM between D. Brin and Scott from Landmark, Mar. 2, 2007, BARC0636429-30; IM between D. Brin and Scott from Landmark, Mar. 6, 2007, BARC0636509-10; IM between Scott from Landmark and D. Brin, Mar. 6, 2007, BARC0636532-33; IM between C. Brown and D. Brin, Mar. 7, 2007, BARC0636570; IM between C. Brown and D. Brin, Mar. 12, 2007, BARC0636640-41; IM between C. Martin and D. Brin, Mar. 14, 2007, BARC0636753-54.

and daily index increased Barclays' substantial physical short position in MIDC peak power that Connelly had established in the prior month.[72]

As Table 1 (which provides Barclays' financial swap position) and Table 2 (which shows Barclays' use of BOM index and daily index) demonstrate, Barclays in certain alleged manipulation months had a financial position in the same direction as its monthly physical position but used daily and BOM physical to reverse its total physical position. For example, Barclays had a monthly physical position of short 875 MW/h for SP peak power in February 2007. However, Barclays reversed that position by buying BOM and daily physical with a maximum daily purchase of 2300 MW/h.[73] This resulted in Barclays having a physical position on this day of long 1425 MW/h (-875 MW/h + 2300 MW/h). As shown in Table 1, Barclays was short an average of 1043 MW/h of SP peak financial swaps during February 2007.[74] Barclays exhibited similar behavior in other months: MIDC off-peak March 2007, MIDC off-peak April 2007, PV peak February 2007, and SP peak March 2007.

In these months, Barclays adjusted its physical index positions from being in the same direction of its financial swap positions to being in the opposite direction. As will be discussed *infra* at 23-35, Barclays then proceeded to flatten its physical positions in the dailies to increase the value of its financial swap positions. Barclays' use of daily and BOM physical in certain months to reverse a monthly physical position to make it opposite in direction to its financial swap reflects a conscious choice to create a physical position that could be used to manipulate cash trading. Similarly, Barclays' decisions to increase a monthly physical position through the use of daily and BOM physical that was already set up opposite in direction to its financial swap in certain months was a conscious choice to acquire a larger physical obligation. Barclays then flattened these obligations through its cash trading to apply buying or selling pressure to manipulate the daily indices in the direction that benefited its financial swap positions.

C. Barclays Coordinated Trading of Dailies

Staff finds that Barclays' trading of dailies was coordinated. On most mornings before the trading of dailies, Brin, Levine, and Smith, who all worked as the physical

[72] IM between R. Smith and N. LaRose, Feb. 27, 2007, BARC0254299-300; IM between R. Smith and G. Brown, Feb. 27, 2007, BARC0264193-94.

[73] *See* Table 2.

[74] *See* Table 1.

cash traders, would discuss that day's physical trading.[75] During these discussions, Brin was responsible for informing Smith and Levine of Connelly's physical positions that were to be traded that day.[76] As part of the discussions, the cash traders would aggregate physical positions that were to be traded that day and allocate the aggregated positions by location with each cash trader taking one or more locations.[77]

The West power desk had a culture that promoted the sharing of information. Connelly had helped teach Brin, Dhabliwala, and Levine to trade[78] and had recruited Brin, Levine, Smith, Gerome, and Dhabliwala to join Barclays.[79] The discussion of strategies and trading on the West power desk was constant. As Brin stated, "[m]ost people knew what everyone's position was. It was all talked about. It was all discussed."[80] Moreover, the traders communicated most often in person orally, rather than over the telephone or through e-mail or instant message.[81] The West power desk

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[75] Brin Test. at 68:14-69:13, 120:17-121:7; Connelly Test. at 529:19-530:9; Dhabliwala Test. at 86:1-87:12; Levine Test. at 68:15-70:19; Smith Test. at 24:21-26:25, 28:7-29:20, 143:10-22.

[76] Brin Test. at 59:3-20, 68:7-69:18; Levine Test. at 70:4-13.

[77] Brin Test. at 68:7-69:18; Dhabliwala Test. at 86:18-25; Levine Test. at 69:9-70:3; Smith Test. at 24:19-26:25, 28:10-29:20, 143:10-22.

[78] Brin Test. at 34:12-21, 61:5-62:24; Dhabliwala Test. at 25:4-14; Levine Test. at 46:18-48:9.

[79] *Supra* notes 11, 13.

[80] Brin Test. at 62:3-4. *See also* Connelly Test. at 405:22-25 ("We spoke, you know, ad hoc on a regular basis about, you know, every aspect of the market we thought was important."), 412:7-22; Brin Test. at 37:24-38:2 ("it's very group setting [sic], so everybody would know these strategies and be vented through – out loud through anyone. So if people had comments on it, they would make comments."), 38:12-16 ("If someone had an idea and spoke up about it, it was usually, it could be in the morning, it could be the afternoon. It could be anytime of the day. If someone had an idea of where they thought value was, they usually discussed it with everyone."), 62:25-63:16, 69:6-18; Dhabliwala Test. at 54:13-55:14; Levine Test. at 46:18-48:9, 55:2-56:17; Gerome Test. at 68:25-71:8.

[81] Brin Test. 37:20-38:16, 88:22-89:16; Connelly Test. at 406:15-18; Dhabliwala Test. at 59:5-7; Levine Test. at 55:2-5, 63:6-10; Smith Test. at 141:7-11, 143:3-9.

consisted of two rows of desks without partitions on the Barclays Commodities Group trading floor that facilitated oral communication.[82]

D. Barclays Flattened its Physical Positions in the Direction of its Financial Swap Positions

Staff finds that Barclays traded dailies on ICE to flatten its daily built physical obligations.[83] As shown *supra* at 15, Table 1 provides maximum, minimum, and simple average cash trading volumes on ICE in MW/h by Barclays for each alleged manipulation month. Table 1 also provides Barclays' maximum, minimum, and simple average financial swap positions and demonstrates that Barclays' financial swaps were in the same direction as its ICE cash trading.

In the alleged manipulation months, Barclays' flattening of its physical positions was not intended to get the best price on those trades. Barclays was not responding to supply and demand fundamentals but rather traded dailies to push daily index settlements up if Barclays was buying dailies and to push them down if it was selling. Barclays' trading in the alleged manipulation months constitutes a pattern of trading significant volumes in the dailies in the direction that benefited its financial swap positions.

Although this report does not summarize all the trading days by product, staff includes several examples of Barclays' cash trading to show how Barclays traded dailies to flatten its physical positions. As these examples illustrate, Barclays traded dailies not intending to receive the best price on its cash trades but rather to increase the value of Barclays' financial swap positions.

- On November 3, 2006, Smith flattened a short PV peak physical position by buying in the cash market on ICE for November 4, 2006 delivery date.[84] The most recent consummated transaction was at 8:59:24 AM[85] for $59.50 when Smith entered the market and bought at $59.50 for a volume of 25 MW/h.[86] Smith and Levine continued to buy dailies at a series of escalating prices. In total they bought 325 MW/h and transacted at a high of $64.00.[87] Barclays

[82] *See* Smith Test. at 129:10-131:15; Smith Test. at Ex. 12.

[83] Connelly Test. at 590:18-591:16; Table 1.

[84] Barclays Trading Data.

[85] All times are in Eastern Prevailing Time.

[86] ICE Data.

[87] Barclays Trading Data.

lost $2,388 trading PV peak dailies against index on this day.[88] Barclays' buying activity took place over 28 minutes from 8:59:29 AM to 9:27:56 AM.[89] Barclays' overall 525 MW/h long financial swap equivalent position[90] gained in value from a higher PV peak daily index settlement that resulted from Barclays' cash trading.

- On February 28, 2007, Connelly flattened a short MIDC peak physical position by buying dailies for March 1, 2007 delivery date.[91] Connelly entered a reserve bid[92] for 1050 MW/h at 8:12:24 AM at $61.50.[93] This reserve bid was exhausted in 42 separate transactions by 8:15:21 AM.[94] Connelly engaged in eleven other buy transactions at prices between $57.25 to $59.25 and one sell at $57.50 that volumetrically netted Barclays' physical position to zero.[95] Connelly did not generally trade dailies and being present for the start of dailies required that he arrive at the office earlier than usual.[96] Connelly lost $44,316 trading MIDC peak dailies against index on this day. Barclays had a long MIDC peak March 2007 financial swap equivalent

[88] Figures can be derived from calculating the difference between prices at which Barclays' traders transacted dailies and the daily index settlement. *See* Barclays Trading Data; ICE Data. The methodology for calculating all profit and loss figures in this report is described *infra* at note 118.

[89] ICE Data; Barclays Trading Data.

[90] Barclays Trading Data.

[91] Barclays Trading Data; Connelly Test. at Ex. 46.

[92] A reserve bid or offer is a feature on ICE that allows the person making the bid or offer to post bids or offers for multiple 25 or 50 MW/h pieces at one time but have ICE only show a bid or offer for a single piece to other market participants. *See* Connelly Test. at 622:5-25; Dhabliwala Test. at 123:19-124:13. As the shown bid is hit or offer lifted, ICE will continue to replenish the bid or offer until the entire reserve quantity is exhausted. *See* Connelly Test. at 622:5-25; Dhabliwala Test. at 123:19-124:13.

[93] Barclays Trading Data; ICE Data.

[94] ICE Data.

[95] Barclays Trading Data; Connelly Test. at Ex. 46.

[96] Brin Test. at 49:4-18, 166:8-18; Gerome Test. at 111:6-21; Levine Test. at 69:20-23, 212:10-20; Smith Test. at 73:2-10, 143:23-144:5.

position of 2,125 MW/h[97] that gained in value from the higher MIDC peak daily index settlement that resulted from Barclays' cash trading.

- On March 1, 2007, Smith, acting similarly to Connelly's behavior from the previous day, flattened a short MIDC peak physical position by buying dailies for March 2 and 3, 2007 delivery dates.[98] Smith entered a reserve bid of 500 MW/h at 8:39:17 AM at $53 before any other transactions had been consummated.[99] This reserve bid was exhausted in 20 separate transactions in 34 seconds.[100] Smith engaged in eleven other buy transactions at $53 and one buy transaction at $52.75. Smith had completed his trading of MIDC peak dailies by 8:40:46 AM by purchasing a total quantity of 825 MW/h in 1 minute and 29 seconds.[101] Smith lost $25,408 trading MIDC peak dailies against index on this day. Barclays had a long MIDC peak March 2007 financial swap equivalent position of 2,150 MW/h for both days of the corresponding package[102] that gained in value from the higher MIDC peak daily index settlement that resulted from Barclays' cash trading.

- On March 6, 2007, Levine took a 25 MW/h long position in the MIDC off-peak financial swap for March 2007.[103] On March 20, 2007, Levine increased her MIDC off-peak long financial swap position by purchasing additional BOM March 2007 MIDC off-peak financial swaps for 25 MW/h and 50 MW/h for a total long financial swap position of 100 MW/h for the balance of the month.[104] MIDC off-peak index prices were collapsing during March 2007 from a high of $52.93 on March 1, 2007 to a low of $.87 on March 31, 2007.[105] On March 14, 2007, Levine began buying dailies in

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[97] Barclays Trading Data.

[98] *Id.*

[99] *Id.*; ICE Data.

[100] Barclays Trading Data; ICE Data; Smith Test. at Ex. 48.

[101] *Id.*

[102] Barclays Trading Data.

[103] *Id.*

[104] *Id.*

[105] *See* Levine Test. at Ex. 36; Barclays Trading Data; ICE Data.

volume in the direction of her financial position to prop up the collapsing prices, buying 225 MW/h on March 14, 2007 and 425 MW/h on March 15, 2007 for delivery on the following days.[106] Following her purchase of the two additional MIDC BOM off-peak financial swaps, Levine increased her cash purchases from 225 MW/h on March 20, 2007 to 525 MW/h on March 21, 2007.[107] Levine continued to inject significant buying pressure in the cash market with net purchases of 700 MW/h on March 22, 2007, 450 MW/h on March 23, 2007, 250 MW/h on March 26, 2007, and 225 MW/h on March 27-29, 2007.[108] Levine lost $26,416 trading MIDC off-peak dailies against index during these days; however, her buying in MIDC dailies increased the value of Levine's and Barclays' MIDC off-peak financial swap position[109] by moving the MIDC off-peak daily index settlements higher.

- On July 5, 2007, Brin flattened a short PV peak physical position by buying in the cash market on ICE for July 6 and 7, 2007 delivery dates.[110] Brin paid $115 per MW/h for 150 MW/h in the first six transactions of the day.[111] Over the remainder of the trading day, Brin bought 1500 MW/h of PV peak power at prices ranging from $110 to $76.75.[112] Brin lost $435,808 trading PV peak dailies against index on this day for the two-day delivery period. Brin had a 250 MW/h long PV peak financial swap equivalent position for both days of the ICE package that gained in value, and Barclays' overall 1,050 MW/h long PV peak financial swap equivalent position for both days of the ICE package[113] also gained in value from the higher PV peak daily index settlement that resulted from Barclays' trading.

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[106] Barclays Trading Data.

[107] *Id.*

[108] *Id.*; Levine Test. at Ex. 37.

[109] Barclays Trading Data.

[110] Barclays Trading Data.

[111] ICE Data; Barclays Trading Data.

[112] *Id.*

[113] Barclays Trading Data.

- On May 27, 2008, Brin flattened a long MIDC peak physical position by selling in the cash market on ICE for May 28, 2008 delivery date.[114] Brin sold at $16.00 per MW/h for a volume of 700 MW/h in six separate transactions.[115] In total, he had net sales in MIDC peak power of 925 MW/h on this day.[116] Brin lost $88,068 trading MIDC peak dailies against index on this day. Brin had a 225 MW/h short MIDC peak financial swap position that gained in value, and Barclays' overall 7,181 MW/h short MIDC peak financial swap equivalent position[117] also gained in value from the lower MIDC peak daily index settlement that resulted from Barclays' trading.

For the month of December 2006 in NP off-peak, staff finds that Barclays manipulated cash trading and daily index settlements on three package trading days: (1) the December 7, 2006 Thursday package for December 8-9, 2006, (2) the December 19, 2006 package for December 21-22, 2006 and (3) the December 21, 2006 holiday package for December 24-25, 2006. Staff concludes that Barclays' trading of these three packages in December 2006 NP off-peak was manipulative because Barclays was trading dailies in the direction of its financial swap position to execute the manipulative scheme it employed in the other alleged manipulation months. Contemporaneous communications discussed *infra* at 41-43 from Smith stating his manipulative intent confirm staff's conclusion that Barclays was intentionally manipulating the NP off-peak cash market and resulting daily index settlements on these days. Staff has calculated the figures in Tables 1 and 2 and the profit and loss (P&L) figures in Table 3 below to reflect that Barclays' manipulation in this product for this month only applies to the specified days rather than the entire month.

Similarly, staff finds that for March 2007 MIDC off-peak, Barclays manipulated twelve trading sessions beginning on March 14, 2007 trade date for March 15, 2007 delivery. Staff discussed Levine's manipulative cash trading in the second half of this month *supra* at 25-26. Staff will discuss the contemporaneous communications between Brin and Smith documenting Levine's manipulative intent for this period *infra* at 44-46. However, Levine's cash trading was in the opposite direction of Barclays' financial swap position for the first eight trading sessions of this month with two additional trading sessions in which she either did not trade or bought a single 25 MW/h contract and hence staff does not believe Levine was manipulating on these days. Staff has adjusted the figures in Tables 1 and 2 and the P&L figures in Table 3 below to reflect the specified

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[114] *Id*.

[115] *Id*.

[116] *Id*.

[117] *Id*.

days. Staff has also removed the 38 trade sessions, discussed *supra* at note 60 where Barclays did not have a physical index position at the start of the day's trading from the calculations in Tables 2 and 3.

E. Barclays' Cash Trading Generally Produced Significant Losses but Benefited Its Financial Swap Positions

Staff finds that in the alleged manipulation months Barclays' trading of dailies against index generally generated significant losses (though on a few occasions produced insignificant monthly losses or gains). Barclays' cash trading, however, benefitted its financial swap positions that were in the same direction of its cash trading. Charts 1-5 show Barclays' manipulative scheme in the MIDC peak, NP peak, PV peak, SP peak, and MIDC off-peak respectively. The alleged manipulation months are shaded red across the bottom. Consistent with the data in Table 1, the blue shaded areas in the top portion of the charts show Barclays' financial swap positions, and the red dots reflect the net MW/h of Barclays' cash trading each day. Barclays' physical position, which it used to offset its cash trading, is not depicted in these charts.

In the alleged manipulation months, Barclays' cash trading was consistently in the direction of its financial swap position as discussed *supra* at 23-28. The charts also depict the monthly cumulative P&L generated by Barclays' cash against index trading and demonstrate the significant losses Barclays was willing to take in the cash markets to benefit its financial swap positions. The alleged manipulation months show a consistent pattern across a given month of Barclays trading dailies against index, usually at a significant loss, in the direction of its financial swap positions.

CHART 1 – BARCLAYS' MIDC PEAK TRADING

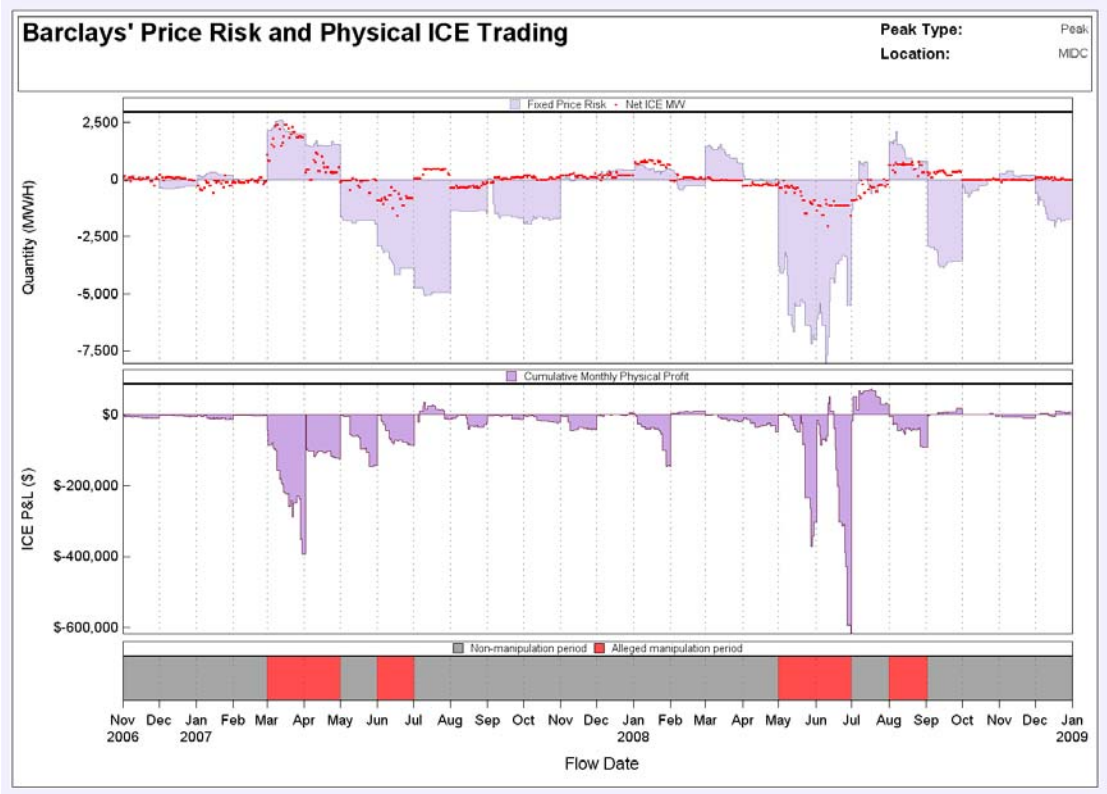


CHART 2 – BARCLAYS' NP PEAK TRADING

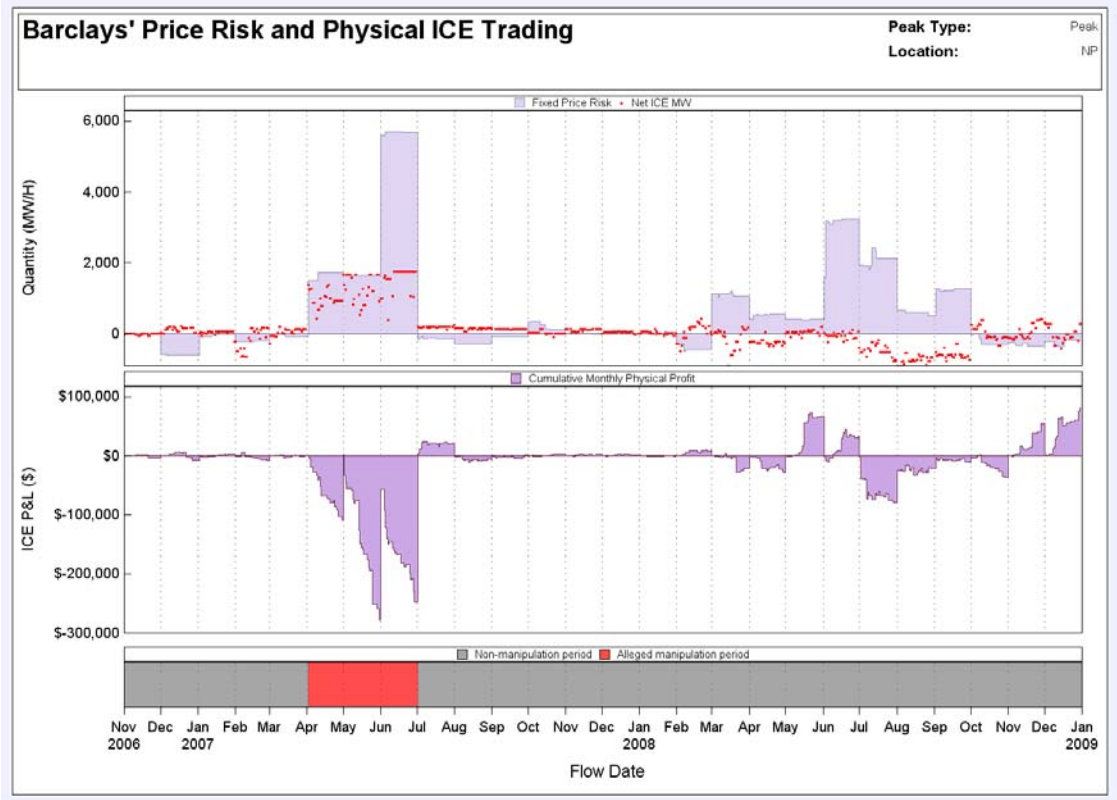


CHART 3 – BARCLAYS' PV PEAK TRADING

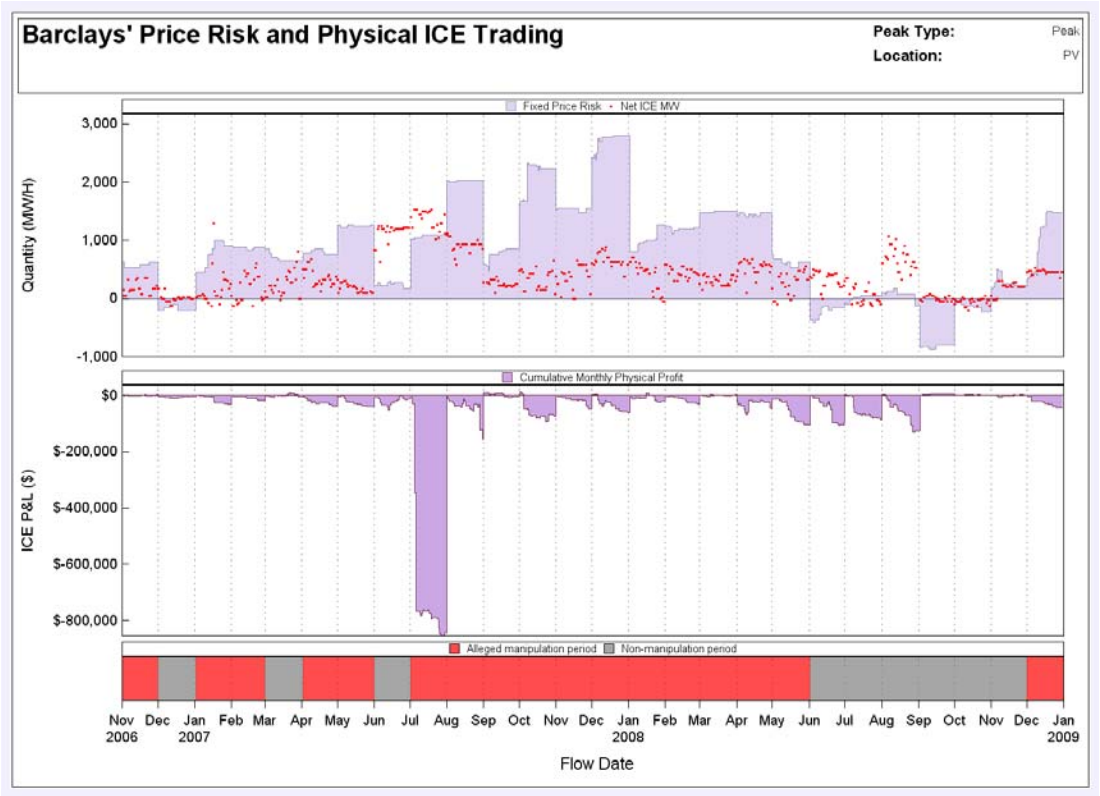


CHART 4 – BARCLAYS' SP PEAK TRADING

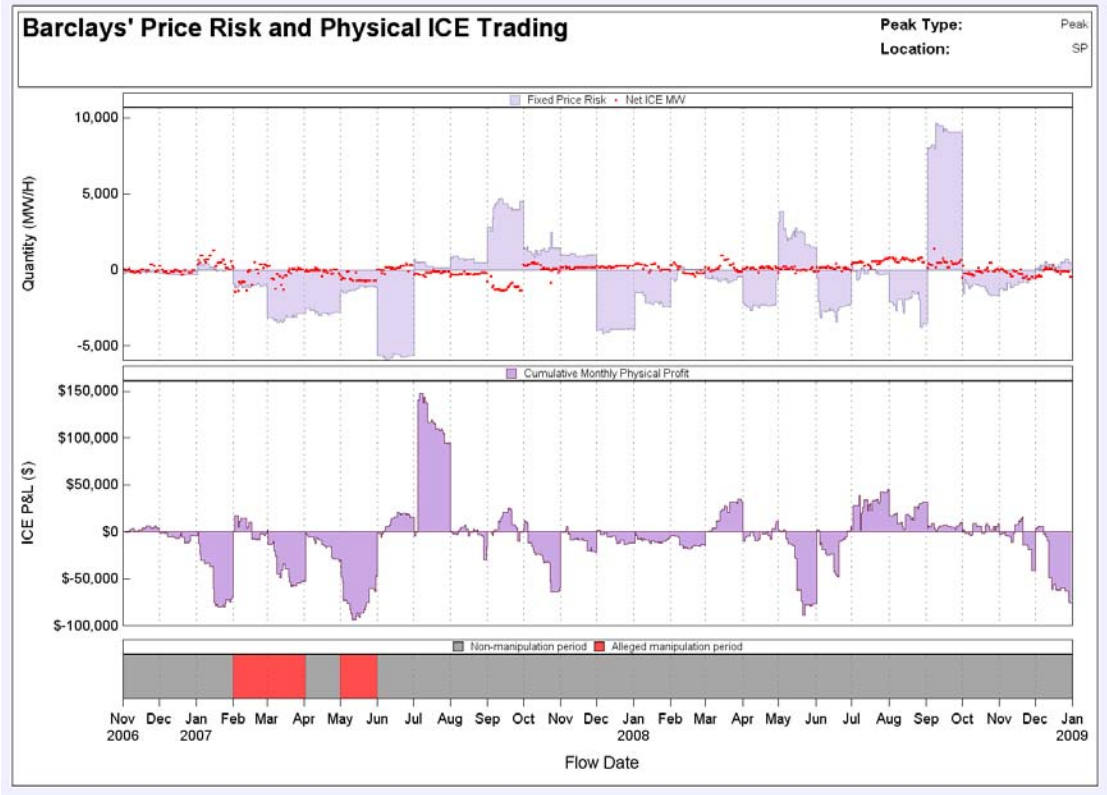
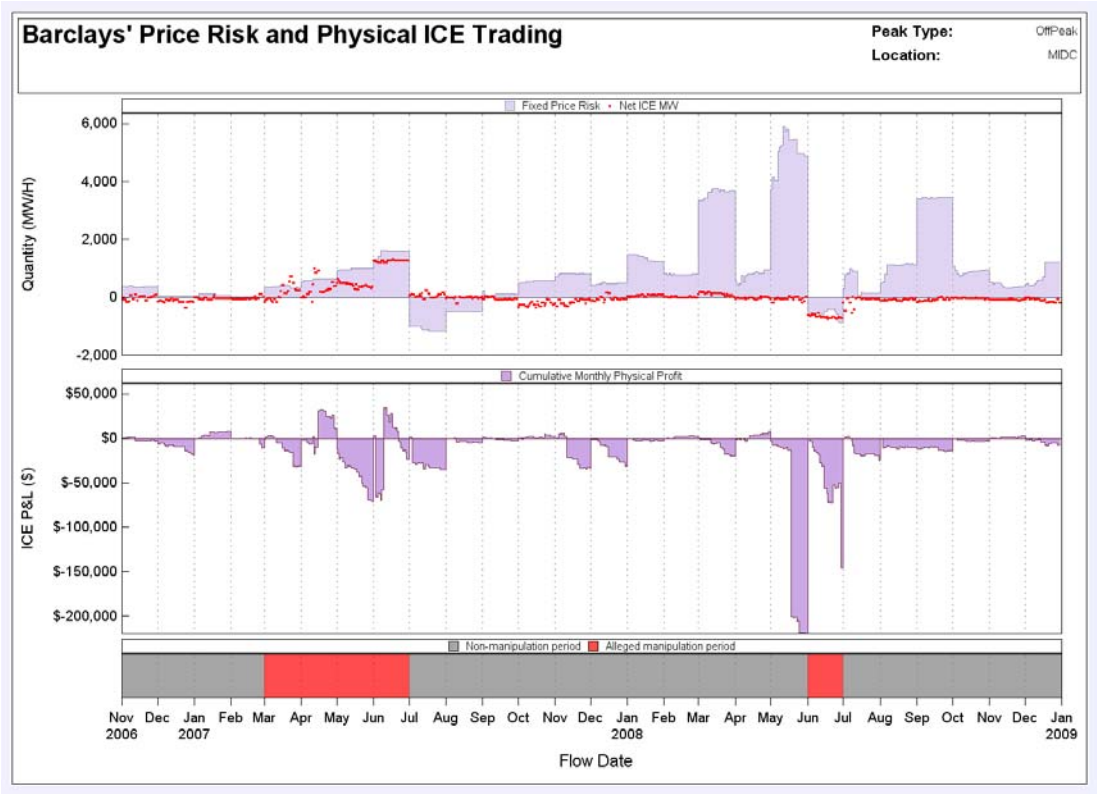


CHART 5 – BARCLAYS' MIDC OFF-PEAK TRADING



In Table 3, staff calculates the losses generated by Barclays' ICE trading of dailies against the physical positions[118] it built discussed *supra* at 16-21. Barclays' trading in the alleged manipulation months lost a total of $4,109,126, an average of $117,404 per month.

[118] Staff calculates dailies against index P&L by using the prices at which Barclays transacted for dailies and the daily index settlements. For purposes of this calculation, staff has included Barclays' daily fixed-price against fixed-price transactions (day trading), a conservative assumption which benefits Barclays because Barclays generally made a profit in its day trading.

TABLE 3
BARCLAYS PROFIT & LOSS FOR CASH AGAINST INDEX TRADING IN THE ALLEGED MANIPULATION MONTHS

	Product	*Location*	*Year*	*Month*	*Profit*
1	OffPeak	MIDC	2007	3	($26,376)
2	OffPeak	MIDC	2007	4	$13,336
3	OffPeak	MIDC	2007	5	($71,054)
4	OffPeak	MIDC	2007	6	($23,700)
5	OffPeak	MIDC	2008	6	($145,784)
6	OffPeak	NP	2006	12	$844
7	Peak	MIDC	2007	3	($392,864)
8	Peak	MIDC	2007	4	($125,560)
9	Peak	MIDC	2007	6	($85,392)
10	Peak	MIDC	2008	5	($302,892)
11	Peak	MIDC	2008	6	($617,768)
12	Peak	MIDC	2008	8	($92,040)
13	Peak	NP	2007	4	($107,980)
14	Peak	NP	2007	5	($276,896)
15	Peak	NP	2007	6	($246,760)
16	Peak	PV	2006	11	$2,020
17	Peak	PV	2007	1	($28,524)
18	Peak	PV	2007	2	($13,928)
19	Peak	PV	2007	4	($36,580)
20	Peak	PV	2007	5	($39,408)
21	Peak	PV	2007	7	($843,068)
22	Peak	PV	2007	8	($157,292)
23	Peak	PV	2007	9	($3,720)
24	Peak	PV	2007	10	($72,716)
25	Peak	PV	2007	11	($47,516)
26	Peak	PV	2007	12	($58,344)
27	Peak	PV	2008	1	($20,696)
28	Peak	PV	2008	2	($29,760)
29	Peak	PV	2008	3	$1,724
30	Peak	PV	2008	4	($46,468)
31	Peak	PV	2008	5	($103,320)
32	Peak	PV	2008	12	($44,676)
33	Peak	SP	2007	2	($16,532)
34	Peak	SP	2007	3	($1,940)
35	Peak	SP	2007	5	($47,496)
		Total			($4,109,126)
		Monthly Average			($117,404)

Most months display significant losses although some display small losses and gains. The fact that Barclays occasionally made small gains in a few months is unsurprising given the number of days on which Barclays manipulated. Moreover, the fact that Barclays' cash transactions were sometimes more favorable than the index it was trading against does not make Barclays' scheme economic. A clear picture emerges when one steps back and looks at Barclays' cash trading activity as a whole. Barclays' cash trading in the alleged-manipulation-month trade sessions lost money on 68%, and made money on 32%, of the days.[119] For comparison purposes, Barclays' cash against index trading made money 47% of the time and lost money 53% of the time in non-manipulation-month trade sessions,[120] a relationship much closer to the 50% of wins and losses that one would expect.

Barclays' losses at the relevant trading points during the period of November 2006 to December 2008 were also of a much greater scale in the alleged manipulation months than the non-manipulation months. As shown in Chart 6, Barclays' daily loss per MWh for its sales of ICE dailies during the alleged-manipulation-month trade sessions averaged $.53/MWh when it had a short financial swap position.[121] In comparison, Barclays' daily loss per MWh on ICE sales when short financially averaged $.01/MWh during non-manipulation-month trade sessions.[122] Similarly, for alleged-manipulation-month trade sessions, Barclays' daily loss per MWh averaged $.40/MWh for its purchases of ICE dailies when it held a long financial swap position.[123] This compares to a loss of $.22/MWh on ICE purchases when long financial swaps during non-manipulation-month trade sessions.[124] These are statistically significant differences that show a difference in the scale of losses in alleged-manipulation and non-manipulation month trade sessions.

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[119] Barclays Trading Data. This calculation uses 654 days because Barclays' cash against index trading broke even on one day.

[120] *Id.*

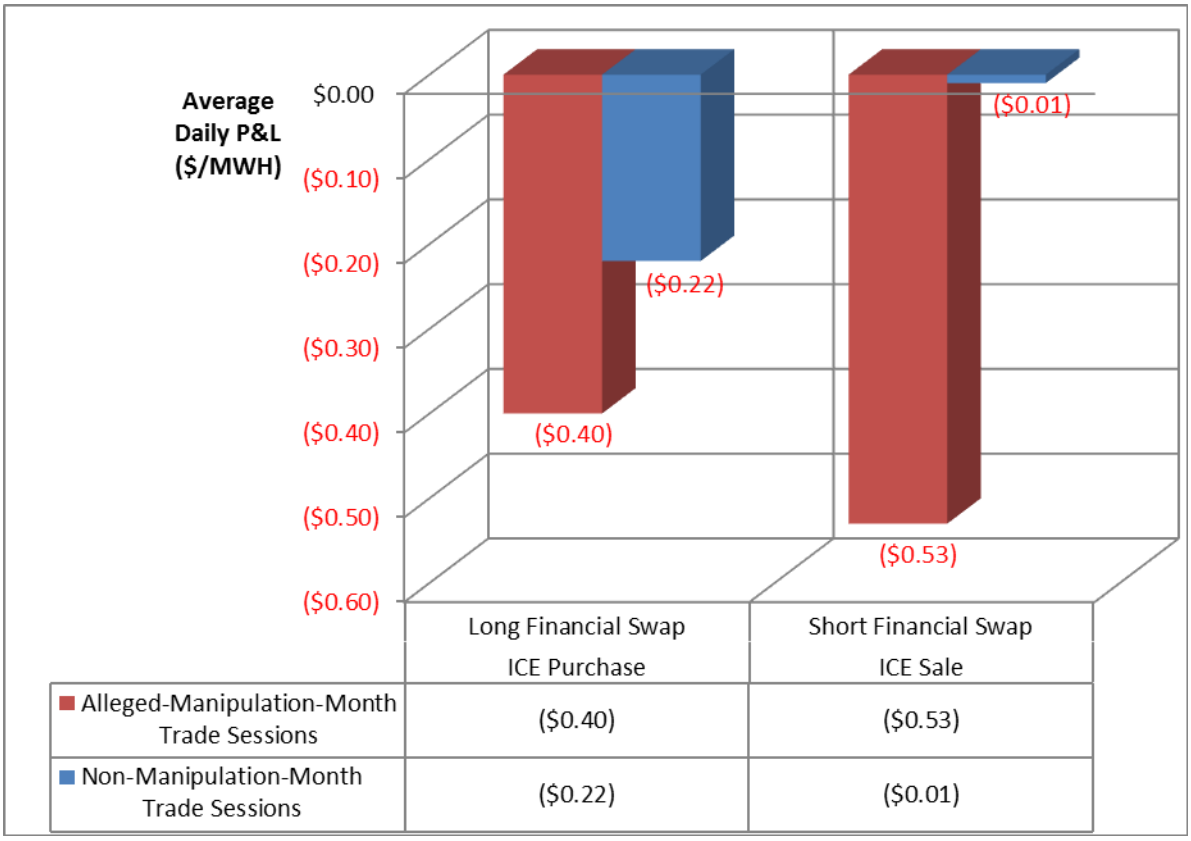
[121] Barclays Trading Data.

[122] *Id.*

[123] *Id.*

[124] *Id.*

CHART 6
BARCLAYS' CASH AGAINST INDEX TRADING P&L COMPARISON



	Long Financial Swap ICE Purchase	Short Financial Swap ICE Sale
Alleged-Manipulation-Month Trade Sessions	($0.40)	($0.53)
Non-Manipulation-Month Trade Sessions	($0.22)	($0.01)

Looking at the cash trading as a whole, one can see that it was generally uneconomic. As will be discussed *infra* at 44-46, contemporaneous communications establish that the Barclays traders understood that suffering daily losses was part of this scheme.

Although Barclays' cash trading often produced substantial losses, its financial swaps settled against the indices derived from cash trading[125] and thereby increased in value by an amount that exceeded Barclays' cash trading losses. By flattening its physical positions through the cash market in the direction of its financial swaps, Barclays was able to move the settlement of the daily indices and thereby enhance the value of its financial swaps. The difference between the daily index and the price at which Barclays' cash trades consummated carried a low price risk.[126] The price risk of a

[125] *Supra* note 42.

[126] Connelly Test. at 332:9-13, 386:14-19, 505:3-507:11, 696:6-15.

position is the financial risk or potential P&L risk associated with the position.[127] The P&L risk each day for cash trading was the difference between the index price and Barclays' cash trades' VWAP.[128]

In contrast to the low price risk of trading dailies against index, the financial swaps that Barclays held carried significant price risk.[129] The financial swaps' price risk was directly linked to any change in the daily index price and would benefit penny for penny from changes in the absolute price of the index. By trading dailies in the direction of its financial swaps in the alleged manipulation months, Barclays was able to use its cash-against-index trading that carried a low price risk to move the value of the daily indices against which its financial swaps carrying a high price risk settled. Therefore, Barclays could afford to suffer losses on its low-price-risk cash-against-index trading to enhance the value of its high-price-risk financial swaps. Although staff is continuing to analyze the data to determine the price impact of Barclays' loss-generating cash-against-index trading on index settlements, its current estimate of the amount Barclays made on its financial swap positions in the 35 alleged manipulation months is $34.9 million as discussed *infra* at 62-63. Staff will continue to refine this estimate as this case proceeds.

V. LEGAL CONCLUSIONS ON BARCLAYS AND ITS TRADERS' BEHAVIOR

The Energy Policy Act of 2005 added an anti-manipulation provision to the Federal Power Act, 16 U.S.C. § 824v (2006), which the Commission codified in 1c.2 through its Order No. 670. As discussed in that order, the Anti-Manipulation Rule prohibits any entity from: (1) using a fraudulent device, scheme or artifice, or making a material misrepresentation or a material omission as to which there is a duty to speak under a Commission-filed tariff, Commission order, rule or regulation, or engaging in any act, practice, or course of business that operates or would operate as a fraud or deceit upon any entity; (2) with the requisite *scienter*; (3) in connection with a transaction subject to the jurisdiction of the Commission.[130] The Anti-Manipulation Rule is intended

[127] *See id.* at 231:18-232:9, 505:22-24.

[128] *See* Gold Test. at 178:18-179:4; Dhabliwala Test. at 29:3-14; Smith Test. at 450:23-451:1.

[129] Connelly Test. at 295:16-296:9, 388:11-22, 390:1-10.

[130] 18 C.F.R. § 1c.2 (2012); *Prohibition of Energy Market Manipulation*, Order No. 670, 114 FERC ¶ 61,047 (2006) (Order No. 670). *Scienter* can be satisfied either by actual intentional conduct or recklessness. Order No. 670 at P 53.

to deter or punish fraud in wholesale energy markets.[131] Fraud is a "question of fact that is to be determined by all the circumstances of a case."[132]

A. Fraudulent Device, Scheme or Artifice; or Act, Practice, or Course of Business That Operates or Would Operate as a Fraud

As to the first element of a violation of 1c.2, staff concludes that the facts support a finding that Barclays and Brin, Connelly, Levine, and Smith employed a fraudulent device, scheme or artifice or engaged in a course of business that operated as a fraud upon next-day fixed-price electricity market participants and on ICE-daily-index electricity-market participants in the alleged manipulation months.

The terms "manipulative or deceptive device or contrivance" are understood by the Commission as they are used in section 10(b) of the Securities Exchange Act of 1934.[133] Following section 10(b) precedent, "[t]he words 'manipulative or deceptive' used in conjunction with 'device or contrivance' strongly suggest that § 10(b) was intended to proscribe knowing or intentional misconduct."[134] The Commission has defined fraud "to include any action, transaction, or conspiracy for the purpose of impairing, obstructing or defeating a well-functioning market."[135]

In determining whether an entity has employed a fraudulent device, scheme, or artifice, the Commission considers, among other factors, whether an actor is responding to existing conditions in a market that present pricing incentives or whether the actor is seeking to manipulate prices.[136] The Commission also considers whether an actor manipulated one market or instrument to benefit a position in another.[137]

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[131] *Id.* at P 5.

[132] *Brian Hunter*, 135 FERC ¶ 61,054 at P 46 (2011); Order No. 670 at P 50.

[133] Order No. 670 at P 52.

[134] *Id.* at P 52 (quoting *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 197 (1976); *accord Aaron v. SEC*, 446 U.S. 680, 690 (1980)).

[135] Order No. 670 at P 50.

[136] *See New York Independent System Operator, Inc.*, 128 FERC ¶ 61,049 at 61,256 (2009).

[137] *Hunter*, 135 FERC ¶ 61,054 at P 48 ("intentional manipulation of market prices for the purpose of benefiting other instruments in the actor's portfolio is actionable") (quoting *Amaranth Advisors L.L.C.*, 124 FERC ¶ 61,050 at P 65 (2008)); *Energy*

As discussed *supra* at 11-35, staff has found that Barclays assembled substantial physical positions in the opposite direction of its financial swap positions and flattened those positions in a manner designed to move the daily index settlements to benefit its financial swap positions. The cash trading that moved the daily index settlements generated substantial losses.[138] Barclays' cash trading was uneconomic because Barclays was willing to suffer cash trading losses to further the external purpose of increasing the value of its financial swap positions. During the alleged manipulation months, Barclays was not responding to fundamentals in these cash markets but rather was injecting additional buying or selling pressure to move the daily cash settlement at these locations. Barclays' own witnesses and internal compliance presentations recognized that uneconomic trading was manipulative activity, and this evidence supports staff's conclusion that Barclays' cash trading constitutes fraud.[139] Because Barclays' cash trading was not responding to market fundamentals but rather was designed to move the daily index settlements in directions that benefited Barclays' financial swap positions, staff concludes that Barclays' cash trading in the alleged manipulation months constitutes a fraudulent device, scheme, or artifice.[140]

In the alleged manipulation months, Barclays' cash trading manipulated not just the cash markets but also the resulting daily index settlements. Barclays' trading operated as a fraud on other market participants. Market participants rely on the ICE daily indices – both as the indices form and at settlement – to evaluate whether their

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Transfer Partners, L.P., 120 FERC ¶ 61,086 at P 41 (2007) ("where a firm uses some combination of market power and trading activity, against its economic interest in one market, in order to benefit its position in another market by artificially moving the market price, the firm likely crosses the line into the realm of manipulation"); *DC Energy, LLC v. H.Q. Energy Services (U.S.), Inc.*, 124 FERC ¶ 61,295, at 62,655 (2008). *See also Markowski v. SEC*, 274 F.3d 525, 529 (D.C. Cir. 2001).

[138] *Supra* at 28-35.

[139] Gold Test. at 111:9-16; Examples of Potential High Risk Areas, BARC0137583-92, at BARC0137585-86; Barclays Capital Commodities Trading and Marketing Compliance Program Presentation, BARC0137593-623, at BARC0137600; BARC063492-526.

[140] *See Hunter*, 135 FERC ¶ 61,054 at P 48; *Markowski*, 274 F.3d at 529 (holding that open market transactions can constitute market manipulation if done with a manipulative purpose); *SEC v. Masri*, 523 F. Supp. 2d 361, 372 (S.D.N.Y. 2007) (holding that allegations of other deceptive conduct or features of the transaction are only required to the extent that they render plausible allegations of manipulative intent).

trades of dailies are prudent, among other commercial purposes.[141] Because Barclays was trading dailies to benefit its financial swap positions, its trading conveyed false price information that did not reflect the fundamentals of supply and demand and operated as a fraud on other market participants.

B. *Scienter*

As to the second element of a violation of 1c.2,[142] staff concludes that in the alleged manipulation months Barclays traded dailies with the intent to manipulate the settlement of ICE daily indices to benefit financial swap positions that settled against those indices. Staff further concludes that, at the least, Barclays acted recklessly in its cash trading and thereby manipulated the settlement of those indices.

1. Intentional Manipulation

The term *scienter* refers to "knowing or intentional misconduct … conduct designed to deceive or defraud investors …."[143] Staff concludes that during the alleged manipulation months Barclays traded dailies with the intent to manipulate daily indices. As discussed *supra* at 21-23, the Barclays traders were involved in constant discussions on the desk and coordinated their cash trading. Therefore, the manipulative actions of the traders were not isolated incidents but rather reflect a coordinated scheme to manipulate the Western power markets.

As will be discussed below, staff has discovered a significant number of communications showing manipulative intent. These communications show that Barclays executed a scheme to manipulate the Western markets for dailies beginning in November 2006. Barclays' trading patterns discussed *supra* at 11-35 suggest the scheme ended in December 2008, a time which corresponds with Barclays reducing its commodities trading risk in response to the financial crisis.[144] The inculpatory statements are particularly significant in light of the fact that Barclays' traders

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[141] *See Amaranth Advisors, LLC*, 121 FERC ¶ 61,224, at P 14 (2007); *Price Discovery in Natural Gas and Electricity Markets*, 104 FERC ¶ 61,121, at P 6 (2003) ("Price indices are widely used in bilateral natural gas and electricity commodity markets to track spot and forward prices.").

[142] Order No. 670 at P 49.

[143] *Id.* at P 52 (*quoting Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 197 (1976); *accord Aaron v. SEC*, 446 U.S. 680, 690 (1980)).

[144] Connelly Test. at 125:14-22.

communicated most often in person rather than through recorded electronic means.[145] Communications demonstrating manipulative intent surfaced from all three physical cash traders and the desk head, Connelly. Some of those communications also involved Gerome and Dhabliwala. The communications revealing manipulative intent are emblematic of Barclays' execution of a coordinated scheme to manipulate cash trading and the daily indices.

a. Evidence of Intentional Manipulation by Ryan Smith

Staff has concluded that Barclays intentionally manipulated the settlement of daily indices to benefit financial swap positions through Smith's trading. Smith's extensive communications demonstrate Barclays' intent to manipulate the daily index settlements in Western power markets. Beginning in November 2006, Smith began communicating with other Barclays' traders and bragging outside Barclays about Barclays' successful manipulation of the Western markets for dailies.

Smith described his actions which constitute manipulation of the PV cash market in November 2006. On November 3, 2006, Smith bragged to his colleague Gerome about how Smith had successfully compressed the spread between SP and PV by trading dailies on ICE to move the PV peak index:

AIM:smittybarcap (9:22:18 AM): I totally fuckked with the Palo mrkt today

AIM:smittybarcap (9:22:38 AM): look at my deals on ice

AIM:geromespecial (9:23:18 AM): Notice: All instant messages sent to and from this buddy name will be logged by the IM Auditor and are subject to archival, monitoring, or review and/or disclosure to someone other than the recipient.

AIM:geromespecial (9:23:18 AM): 250 mw

AIM:smittybarcap (9:23:28 AM): was fun. need to do that more often

AIM:geromespecial (9:24:19 AM): how far did you move the index/

AIM:smittybarcap (9:24:45 AM): not too far. it had already tarded about 1200 mws

AIM:smittybarcap (9:25:19 AM): shoulda started earlier. but my goal was to keep the sp/palo tighter

AIM:geromespecial (9:25:58 AM): its trading way in now

AIM:geromespecial (9:26:12 AM): index is like 7, trading 5.75

AIM:smittybarcap (9:26:49 AM): I know. I just started lifting the piss out of the palo

IM between R. Smith and M. Gerome, Nov. 3, 2006, BARC0260014-15.[146]

[145] *Supra* note 81.

[146] "[T]arded" appears to have been a typo for "traded." "Trading way in" means the SP to PV spread has become smaller. Gerome Test. at 158:5-8. Palo is another

As discussed *supra* at 23-24, Smith and Levine added significant buying pressure to the PV peak market this day by purchasing a net of 325 MW/h at escalating prices ranging from $59.50 to $64.00 while Barclays lost $2,388 trading PV peak dailies against index on that day.

A few days later, Smith in an instant message with Brin discussed how he had bought so much power in the dailies at PV that he could not determine whether he was flat. During this conversation, Smith revealed that the intent of his purchases was to push the PV peak index up by selling index power and buying it back in the dailies to benefit a long PV financial swap position:

....
AIM:smittybarcap (10:18:33 AM): I did too much palo today. can't figuure out if I'm flat

AIM:brind3711 (10:18:51 AM): do you know your position coming in

AIM:smittybarcap (10:20:34 AM): yeah. but I sold a bunch of index cause I'm long palo and that sp/palo keeps getting wider, so I was trying to prop up the palo index. I think it worked well too

AIM:smittybarcap (10:20:44 AM): I think I'm just short one piece now

IM between D. Brin and R. Smith, Nov. 9, 2006, BARC0633705-06.[147]

Smith's intent to manipulate the PV index this month through high volume cash-against-index trading is also supported by a number of other communications where he claimed to "own the palo" and bragged about the volumes he was trading.[148] Staff concludes that Smith's comments about large trading volumes describe a strategy of using volume cash trading to manipulate the PV peak cash market and resulting daily index settlements.[149]

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means of referring to the Palo Verde trading location. *See* Brin Test. at 55:17-22. "Lifting" is a term traders use that means to accept offers to sell. *See* Smith Test. at 65:19-20. Gerome's IM name is "geromespecial."

[147] Brin's IM name is "brind3711."

[148] IM between R. Smith and L. Eliason, Nov. 3, 2006, BARC0260018-19 ("I own the palo mrkt, BTW"); IM between R. Smith and E. Hunzeker, Nov. 3, 2006, BARC0260020-21 ("I was lifting the piss out of the palo."); IM between E. Hunzeker and R. Smith, Nov. 9, 2006, BARC0260120-21 ("had one of my days again. / about 29 to 30 deals on ice. don't know why I do it"); IM between R. Smith and C. Crowell, Nov. 17, 2006, BARC0260442-43 ("I own the SP and palo btw… man I'm going thru my ice deals. wow. Def. a record. And to top it off, I don't write them down as I do them.").

[149] The various explanations Smith offered in his testimony are not credible: "it just appears that I was active in the Palo market" (Smith Test. at 425:13-14); "fucked

In December 2006, Smith continued to repeat his intent to manipulate and the success of his manipulative actions. On December 7, 2006, Smith communicated to Brin his intent to manipulate the NP off-peak, also known as "light," index by selling volume to push down the price:

> ....
> AIM:smittybarcap (8:40:56 AM): don't buy any sp light index.
>
> AIM:smittybarcap (8:42:35 AM): I'm gonna try to crap on the NP light and it should drive the SP light lower
>
> AIM:brind3711 (8:42:43 AM): that is fine
>
> AIM:smittybarcap (8:42:55 AM): don't buy too early
>
> AIM:brind3711 (8:43:04 AM): yup
>
> AIM:smittybarcap (8:43:21 AM): I got the palo hvy
>
> AIM:smittybarcap (8:43:30 AM): you do midc hvy
>
> AIM:brind3711 (8:43:30 AM): okay

IM between R. Smith and D. Brin, Dec. 7, 2006, BARC0634600-01.

On December 21, 2006, Smith communicated to a friend from Mirant his intent to manipulate the NP off-peak market again:

> AIM:smittybarcap (8:27:01 AM): sell mke 100 MWs NP light index
>
> AIM:crowellmirant (8:27:01 AM): Notice: All instant messages sent to and from this buddy name will be logged by the IMAuditor and are subject to archival, monitoring, or review and/or disclosure to someone other than the recipient.
>
> AIM:crowellmirant (8:27:01 AM): IM Administrator: Notice: All instant messages will be logged by Mirant Corporation and are subject to archival, monitoring, review and/or disclosure to someone other than the recipient.
>
> AIM:crowellmirant (8:29:11 AM): ok, bid?
>
> AIM:smittybarcap (8:31:04 AM): just got it cleaned up
>
> AIM:smittybarcap (8:31:10 AM): .05's traded for vo.ume
>
> AIM:crowellmirant (8:33:59 AM): yeah right. you bot .10s
>
> AIM:smittybarcap (8:34:23 AM): you wish.
>
> AIM:smittybarcap (8:34:35 AM): if you're long NP light I suggest selling it ealy
>
> AIM:crowellmirant (8:34:58 AM): we're short 1,000
>
> AIM:smittybarcap (8:35:20 AM): you'll see me offered there. well, ten have your bid behind and I'll send it your way
>
> AIM:crowellmirant (8:35:26 AM): why you buy index if its gonna tank?
>
> AIM:smittybarcap (8:35:57 AM): my lil secret
>
> AIM:crowellmirant (8:37:15 AM): you cray
>
> AIM:smittybarcap (8:37:47 AM): tell you about it later
>
> AIM:crowellmirant (8:38:22 AM): call me on the bat line
>
> AIM:smittybarcap (8:38:33 AM): aight

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would just give that general sense of, you know, having fun in trading that particular day" (*id.* at 425:15-17); "[i]n the chain of many multiple IMs throughout the day, there's language - - there's loose language" (*id.* at 455:8-10).

IM between R. Smith and C. Crowell, Dec. 21, 2006, BARC0261785-86.

Later that day, Smith's friend checked with Smith to see if Smith had been successful.[150] Responding to his friend's inquiry, Smith indicated that, although his trading made a profit by having his VWAP in dailies be better than the index, his actual goal in selling a large cash volume was to benefit his BOM position by preventing the December 21, 2006 daily index from negatively impacting the value of the BOM financial swap:

> ….
> AIM:crowellmirant (10:35:47 AM): you cash in on NP lt?
>
> AIM:smittybarcap (10:36:14 AM): not too much. did decent vol. and beat by .10
>
> AIM:smittybarcap (10:36:29 AM): but my goal was more for my B OM position
>
> AIM:smittybarcap (10:36:45 AM): didn't want the 2x24 to settle higher than the BOM marks
>
> AIM:crowellmirant (10:37:21 AM): i hears that. didnt really tank like i thought
>
> AIM:smittybarcap (10:37:43 AM): that was pretty low for a 2x24 though. I thought.
>
> AIM:smittybarcap (10:38:17 AM): I ran out of NP light to sell. wasn't sure how much vol. would trade today. shoulda done a few more hundy
>
> ….

IM between C. Crowell and R. Smith, Dec. 21, 2006, BARC0261803-06.[151]

In a conversation with the same friend on December 19, 2007, Smith again indicated that he intended to sell heavy volume in NP light to move the daily index settlement lower. Smith told his friend "ha. hope you weren't long NP light … I seriously did half the volume / was afraid I wasn't going to be able to sell it."[152] Although Smith again indicated that he "beat index on 500," it seems very likely based on his statements that he "sold early, and often" and "crushed index" that his goal was to move the NP light settlement lower as he described his goal in his December 21, 2007 discussions.

Smith's later explanations for his statements made in December 2006 contradict the plain meaning of the words and lack credibility.[153] Staff concludes that Smith's

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[150] Smith Test. at 52:15-19.

[151] The term "lt" refers to light electricity which is another term for off-peak. *See id.* A "2x24" is two off-peak days traded together as a package that occurs around holidays. *Id.* at 52:22-53:4.

[152] IM between R. Smith and C. Crowell, Dec. 19, 2006, BARC026149-51.

[153] Smith Test. at 14:23-17:23, 43:14-47:24, 55:1-61:15.

instant messages from December 2006 reveal a strategy by which Smith intervened in the cash markets on selective days during the month when Barclays' financial swaps were in jeopardy of losing value. As Smith stated in the December 21, 2006 instant message, his cash trading was designed to protect Barclays' BOM financial swap position by keeping the daily index from settling higher than where he had the BOM financial swap position valued or marked. Because Barclays was short NP off-peak financial swaps, [154] a higher settlement in the daily index on December 21, 2006 would have resulted in Barclays paying out a higher daily index settlement. As Smith observed in his instant message, a higher daily index settlement would also adversely affect the marked-to-market value of Barclays' short BOM financial swap position because it would likely push prices of the BOM financial swap higher.

Although not during an alleged manipulation month, Smith in a January 4, 2007 e-mail to Levine acknowledged the relationship between an increase in cash prices at SP and his purchasing large volumes in dailies: "Cash [at SP][155] was pretty strong for a Friday/Sat. (prob. Cause I was buying 1250 MWs. And someone else must've been short.)."[156] On February 8, 2007, Smith had a discussion with a trader for Sempra who formerly worked with Connelly.[157] In this instant message, Smith and the Sempra trader discussed Smith's dumping of the physical power he acquired at index into the cash market to push down the price:

AIM:setcjake (8:52:14 AM): http://www.sempratrading.com/disclaimer.asp

AIM:setcjake (8:52:14 AM): you blow your index load yet?

AIM:smittybarcap (8:52:28 AM): not yet. why?

AIM:setcjake (8:52:57 AM): watching to see how low the hr's can get

AIM:setcjake (8:54:00 AM): its like that battle sceen from Braveheart: hold...hold...unleash hell!!

AIM:smittybarcap (8:54:17 AM): ha.

AIM:setcjake (8:54:53 AM): with no load/low volume, a hvy handed index dump really moves it

AIM:smittybarcap (8:55:16 AM): that's funny as hell. good braveheart

[154] Barclays Trading Data; Table 1.

[155] Smith testified that his purchases discussed in BARC0507675 were at SP. Smith Test. at 76:1-6.

[156] E-mail from R. Smith to K. Levine, Jan. 4, 2007, BARC0507675.

[157] Smith Test. at 97:6-13.

IM between J. Thomas and R. Smith, Feb. 8, 2007, BARC0263349-50.[158]

On March 26, 2007, Smith outlined to another friend at Mirant how selling physical index and trading against it in the dailies can be used to support the value of long financial swap positions when he assumed that Morgan Stanley was selling index so that it could "prop" April 2007 MIDC cash prices and hence support its financial swap position:

AIM:smittybarcap (12:30:09 PM): what's going on?

AIM:hunzekermirant (12:30:10 PM): Notice: All instant messages sent to and from this buddy name will be logged by the IMAuditor and are subject to archival, monitoring, or review and/or disclosure to someone other than the recipient.

AIM:hunzekermirant (12:30:10 PM): IM Administrator: Notice: All instant messages will be logged by Mirant Corporation and are subject to archival, monitoring, review and/or disclosure to someone other than the recipient.

AIM:hunzekermirant (12:30:50 PM): just researching april mid.

AIM:smittybarcap (12:36:49 PM): morgan solda bunch of midc index

AIM:smittybarcap (12:37:08 PM): which means they're prob. long as hell midc

AIM:hunzekermirant (12:38:11 PM): bom or april?

AIM:smittybarcap (12:38:17 PM): apr

AIM:hunzekermirant (12:39:08 PM): transalta buying in april mid

AIM:smittybarcap (12:39:19 PM): yeah and coral

AIM:hunzekermirant (12:40:17 PM): if they flow a foot a day, i have to think bpa crushes this market in april. if they don't, it could pop with all of the shorts in the market.

AIM:smittybarcap (12:41:33 PM): I think a lot of peoplebought apr. and sold june recently.(with the strength in cash) so we'll see

AIM:smittybarcap (12:42:09 PM): i guess that's prob. what MS did. so they'll try to prop it up

AIM:hunzekermirant (12:43:38 PM): sempra's short april mid. not sure after that.

AIM:smittybarcap (12:44:55 PM): pretty sure ms is long

IM between R. Smith and E. Hunzeker, Mar. 26, 2007, BARC0265031-32.[159]

Similarly, in discussing Levine's intent to manipulate the MIDC off-peak index in March 2007, Smith in instant messages with Brin again showed that he understood how index could be used to run cash prices up to support financial swap positions and that such trading often resulted in taking daily losses in the cash market:

[158] The term "hr's" refers to heat rates, a ratio of electricity to natural gas prices. *See* Smith Test. at 98:1-5.

[159] The terms "morgan" and "MS" refer to Morgan Stanley. *See* Smith Test. at 360:2-362:21.

AIM:smittybarcap (8:34:52 AM): think she wants you to run the off peak up (she's long) not sure why she doesn't do more. prob. doesn't want to take the loss daily and pay all the bro

….

IM between R. Smith and D. Brin, Mar. 21, 2007, BARC0636940-41.[160]

Smith and Brin continued their conversation an hour later in another instant message:

AIM:brind3711 (9:38:33 AM): Notice: All instant messages sent to and from this buddy name will be logged by the IMAuditor and are subject to archival, monitoring, or review and/or disclosure to someone other than the recipient.

AIM:brind3711 (9:38:33 AM): she is getting killed on that midc ll, she really wanted someone to try and prop it up

AIM:smittybarcap (9:39:00 AM): why doesn't she? you know. with BPA selling it, how much can you prop it up

AIM:smittybarcap (9:39:09 AM): she hung on too long

AIM:brind3711 (9:41:50 AM): she is long 200 midc ll

AIM:smittybarcap (9:42:27 AM): on top of her sp/mid hvy.

AIM:brind3711 (9:42:50 AM): yeah

….

IM between D. Brin and R. Smith, Mar. 21, 2007, BARC0636944-45.[161]

On the following day, Smith and Brin continued to discuss Levine's intent to manipulate the MIDC off-peak index to get favorable marked-to-market values on her financial swaps:

[160] "[S]he" refers to Levine. Brin Test. at 159:14-17; Smith Test. at 366:12-367:5. "[B]ro" refers to brokerage fees. *See* Brin Test. at 166:20-167:2; Smith Test. at 368:4-8.

[161] "[S]he" refers to Levine. Brin Test. at 172:23-173:25. The use of "ll" refers to "light-load," a term which is interchangeable with off-peak electricity. Brin Test. at 174:3-4; Connelly Test. at 93:14-15. "BPA" refers to Bonneville Power Administration, a federal marketer that controls the bulk of the Columbia River generation in the Pacific Northwest. Connelly Test. at 484:1-9. "[H]vy refers to heavy or peak electricity. *See* Smith Test. at 385:12-21. Smith's explanation that his use of the term "prop up" referred to the market rising rather than Levine or Barclays taking action to move the price upward defies the plain meaning of the words and lacks credibility. *See* Smith Test. at 366:12-25, 381:18-25.

AIM:smittybarcap (11:20:13 AM): why does she tell me to do stuff

AIM:brind3711 (11:22:07 AM): Notice: All instant messages sent to and from this buddy name will be logged by the IMAuditor and are subject to archival, monitoring, or review and/or disclosure to someone other than the recipient.

AIM:brind3711 (11:22:07 AM): bc she wants to marks on trades but doesnt want them herself

AIM:brind3711 (11:22:30 AM): just like she didnt want daily loss trading midcll in her book so wanted us to trade it

IM between R. Smith and D. Brin, Mar. 22, 2007, BARC0637014-15.

Smith understood Levine's strategy of trading dailies to move the daily index settlement to generate favorable marked-to-market values on her financial swaps because he had outlined the same strategy on December 21, 2006 as discussed *supra* at 41-43.

Smith extensively described his and his colleagues' manipulative scheme of flattening physical index positions to "prop up" and "crap on" cash trading to move financial swap position values that settled against the indices that Barclays manipulated through cash trading. Smith's extensive documentation of manipulative activity runs throughout his employment and encompasses multiple products and locations rather than being focused on a single month or market.[162] Staff concludes that Smith was an active participant in Barclays' manipulation.

b. Evidence of Intentional Manipulation by Daniel Brin

Staff has concluded that Barclays intentionally manipulated the settlement of daily indices to benefit financial swap positions through Brin's trading. On November 30, 2006, Brin in an instant message to a friend from Mirant explained in detail that he was trading physical power to move the daily index settlement to benefit financial swaps held by Connelly:

[162] Barclays terminated Smith in late March 2007 for reasons unrelated to Barclays' manipulative conduct. *See* Connelly Test. at 507:17-514:4; Gold Test. at 152:10-155:17; Smith Test. at 182:7-185:23.

AIM:brind3711 (12:10:42 PM): traded today for first time in a few months, man im an idiot

AIM:crowellmirant (12:10:43 PM): Notice: All instant messages sent to and from this buddy name will be logged by the IM Auditor and are subject to archival, monitoring, or review and/or disclosure to someone other than the recipient.

AIM:crowellmirant (12:10:43 PM): IM Administrator: Notice: All instant messages will be logged by Mirant Corporation and are subject to archival, monitoring, review and/or disclosure to someone other than the recipient.

AIM:crowellmirant (12:10:55 PM): you covering for Karen?>

AIM:crowellmirant (12:11:09 PM): you pull a Smitty and miscount

AIM:brind3711 (12:11:55 PM): no SC Dec position, KL and Smitty dont want to take on that size anymore so Im gonna give it a whirl till good balance offers come out

AIM:brind3711 (12:12:07 PM): for just dec

AIM:crowellmirant (12:13:16 PM): you gonna trade some balmo's. y0ou da man

AIM:brind3711 (12:14:08 PM): i suck miscounted in one hub and bought when i should of sold in another

AIM:brind3711 (12:14:12 PM): im smart

AIM:crowellmirant (12:14:32 PM): youre not so bright. you get burned?

AIM:crowellmirant (12:15:22 PM): i didnt do shit today. im just gonna start day trading with no real thoughts on what the market is doing. gonna try to just get lucky

AIM:brind3711 (12:15:26 PM): no not too bad, its weird bc some hubs he is oppiste fin /phys, im doing phys so i am trying to drive price in fin direction

AIM:crowellmirant (12:15:59 PM): yeah, we do that here. i dont really get it too much. why be long fin, and short phys

AIM:brind3711 (12:16:41 PM): i think it is a mistake, or sc does it when he hates guy on other side and wants to just run it against him

AIM:crowellmirant (12:16:53 PM): unless your fin. is much bigger. but if you have conviction the mkt is going one way, seeems counter productive

AIM:brind3711 (12:17:13 PM): oh yeah it is much bigger on one side

AIM:brind3711 (12:17:48 PM): i agree with you

AIM:crowellmirant (12:18:09 PM): and then, if your phys is small, how can move the market?

AIM:crowellmirant (12:18:21 PM): i need a mentor, these guys are retards

....

IM between D. Brin and C. Crowell, Nov. 30, 2006, BARC0634367-69.[163]

[163] "SC" refers to Connelly; "KL" refers to Levine; and "Smitty" refers to Smith. Brin Test. at 158:21-159:13. The term "fin" refers to financial, and the term "phys" refers to physical. *See id.* at 333:2-6.

Brin's statement that Connelly "is oppiste [sic] fin /phys, im [sic] doing phys so i [sic] am trying to drive price in fin direction" demonstrates that Connelly purposefully set up physical positions opposite to his financial positions for the purpose of trading dailies to drive the daily index settlements in a direction that favored Connelly's financial swap position. The statement also demonstrates that Brin understood how this strategy worked. Moreover, Brin's reference to the financial position being "much bigger on one side" demonstrates that Brin understood this was a strategy that produced the best results with large financial swap positions.[164] Brin stated in his testimony that he understood his physical cash trading would move the index price: "at this time it looks like in November of 06, I thought it was weird that there was fin[ancial and] phys[ical] positions on at the same hub, and that if I was going to be trading phys[ical], it would affect the price."[165] When asked what price would be affected, Brin responded the price was "the index I was trading the physical in."[166] The daily index was the amount Barclays received when it was long financial swaps and the amount it paid out when it was short.[167] Brin also stated that his reference to "phys" or physical refers to cash trading.[168]

On March 8, 2007, Brin, in another instant message with his friend from Mirant, discussed a market participant acquiring large volumes of physical power. Brin demonstrated in this discussion that he understood that trading large volumes in the cash market could be used as a technique to move the daily index settlement:

....

AIM:brind3711 (3:35:11 PM): you see sp next day already trading 700 mws

AIM:brind3711 (3:35:20 PM): 400 mws bid

AIM:brind3711 (3:36:04 PM): has to be someone wanting to push down index tommorw, loading up today to sell it in the moring? otherwise why do it, it doest go into index

AIM:crowellmirant (3:40:11 PM): 925 now

....

IM between C. Crowell and D. Brin, Mar. 8, 2007, BARC0636593-95.

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[164] Brin agreed that the quoted statement referred to the financial position being much larger. Brin Test. at 344:19-25.

[165] *Id*. at 330:24-331:2.

[166] *Id.* at 331:3-5.

[167] *Supra* note 42.

[168] Brin Test. at 334:21-23, 349:13-350:4.

Brin also demonstrated that he understood the technique of trading dailies to "prop up" daily index settlements through loss-generating cash-against-index trading in the previously discussed instant messages he exchanged with Smith regarding Levine's desire to manipulate the daily settlement of the MIDC off-peak index in March 2007.[169] Brin was also the other participant in some of the previously discussed instant messages where Smith discussed his intent to manipulate daily indices.[170] Staff concludes that Brin was an active participant in Barclays' manipulation.

c. Evidence of Intentional Manipulation by Karen Levine

Staff has concluded that Barclays intentionally manipulated the settlement of daily indices to benefit financial swap positions through Levine's trading. In instant messages on October 11, 2006 with a broker who did work for traders at Barclays,[171] Levine discussed Barclays' reasons for trading physical index power:

AIM:butkus20 (9:02:43 AM): Notice: All instant messages sent to and from this buddy name will be logged by the IM Auditor and are subject to archival, monitoring, or review and/or disclosure to someone other than the recipient.

AIM:butkus20 (9:02:43 AM): can i ask a question

AIM:butkus20 (9:02:53 AM): why do you guys trade this stuff

AIM:levinebarclays (9:03:07 AM): we were just having the same conversation

AIM:butkus20 (9:03:28 AM): to just flatten out next day ahead positions... or to try and beat the index

IM between J. Rainess and K. Levine, Oct. 11, 2006, BARC0390264.[172]

Levine responded to the broker's question 34 minutes later and revealed that Barclays traded physical index to "protect" the value of financial positions the bank had taken:

[169] *Supra* at 44-46.

[170] *Supra* at 40-41. Staff does not find credible Brin's testimony that he does not understand the statements in his instant messages or sees them just as expressions of hope that the market moves in a direction. *See* Brin Test. at 161:8-17, 163:3-10, 166:20-167:11, 172:23-174:18, 179:7-180:15, 187:5-188:11, 315:12-316:23, 321:2-22.

[171] Levine Test. at 117:20-118:1.

[172] Levine stated in her testimony that "stuff" referred to index power. Levine Test. at 122:22-23. Levine's IM name is "levinebarclays."

AIM:levinebarclays (9:37:37 AM): here's my take...yes on the flattening a big position, yes on the try to beat index, and also to try to protect a postion, either bom or prompt. I think it's outta control and people should trade outright...bunch of chicken shits

AIM:butkus20 (9:38:57 AM): Notice: All instant messages sent to and from this buddy name will be logged by the IM Auditor and are subject to archival, monitoring, or review and/or disclosure to someone other than the recipient.

AIM:butkus20 (9:38:57 AM): thats a fair summation

AIM:levinebarclays (9:39:35 AM): and makes for BORING dailies

AIM:butkus20 (9:40:12 AM): i see

IM between K. Levine and J. Rainess, Oct. 11, 2006, BARC0390265-67.

Staff does not find credible Levine's explanation in her testimony that her statement that a reason to trade index was "to try to protect a position, either bom or prompt" referred to cash traders generally rather than activity at Barclays.[173] A fair reading of the instant message shows that Levine was referring to a strategy of "protect[ing]" the value of BOM or prompt month financial swap positions by building physical index positions and flattening those positions in the dailies to move daily index settlements. The trading of dailies against index to "protect" BOM financial swaps is the same strategy Smith discussed on December 21, 2006, discussed *supra* at 41-43, and Smith and Brin stated that Levine was asking them to employ for MIDC off-peak March 2007 trading, discussed *supra* at 44-46, when they discussed trading dailies to obtain favorable marked-to-market values.

In a January 31, 2007 e-mail to the traders on the West power desk explaining how she would like her position traded while out of the office,[174] Levine documented her BOM financial swap position in the SP to PV spread and then requested her colleagues trade to keep the spread from expanding to benefit her BOM financial swap position:

[173] Levine Test. at 122:14-21, 128:8-129:4.

[174] Levine testified that she was out of the office skiing during this period. *Id.* at 170:2-6.

From: Levine, Karen: Commodities (NYK)
Sent: Wednesday, January 31, 2007 7:11 PM
To: Gerome, Michael: Commodities (NYK); Connelly, Scott: Commodities (NYK); Smith, Ryan J: Commodities (NYK); Dhabliwala, Monal: Commodities (NYK); Brin, Daniel: Commodities (NYK)
Subject: Karen's Postion and things to look for Feb. 1 -12

I am out Feb. 1-9, reachable tomorrow (Feb. 1st in the Portland office in the afternoon). I don't have much of a phys position this month, it's mainly financial.

BOM Phys position:
Long 100 MWs SP15 off peak
Shirt 100 MWs NP15 off peak

Please check the Path 15 S-N ATC every day. It seems like Path 15 can congest if the ATC is less than 3700 MWs S-N. I checked the 7-day and there are a few sketchy days, but for most of the hours looks ok...please watch this...closely. I will flow the MWs for anything more than $.25 np over. If you need to book a Tx deal, you can use #4999082 and copy the info (Maria can help you). If you do flow anything, please check the DA interim congestion and submit adjustment bids as required. If you need to copy some, try MALIN_5_RNDMTN, BARCDACOBIN and SYLMAR_2_NOB, BARCDANOBOUT for Feb. 01.

BOM Fin position:

Mid-C on peak: short 25 fin
Mid-C off-peak: long 50 fin

SP15 on peak: short 175 fin
PV on peak: long 200 fin

The PV line was very close to congesting today as was Mead, tons of room left at FC. I hope the SP/PV spread doesn't start congesting as it's going to push the spread out, average import cost is somewhere around $4 to $4.50 so you don't need a lot of congestion to get that spread out to $6 or worse. If we can keep the PV index up and the SP daily index down somehow that will be good to keep the BOM in.

….

E-mail from K. Levine to M. Gerome, S. Connelly, R. Smith, M. Dhabliwala, and D. Brin, Jan. 31, 2007, BARC0472014.

In her testimony, Levine claimed not to understand her statement "If we can keep the PV index up and the SP daily index down somehow that will be good to keep the BOM in."[175] Staff does not find her purported lack of understanding credible and concludes the statement on its face is a request for her colleagues to trade dailies to move the daily settlements for the PV index higher and the SP index lower to benefit her short position in the SP to PV spread, a BOM financial swap position which she set forth in the same e-mail. Staff concludes that Dhabliwala and Smith acted on Levine's request to trade dailies to move the SP index while she was out of the office.[176] Staff discussed *supra* at 21 how during this month Barclays reversed its SP monthly index position through BOM and daily index to enable it to trade in the direction of its financial swap.

[175] Levine Test. at 168:21-169:12.

[176] Barclays Trading Data; Dhabliwala Test. at 148:16-157:5; IM between R. Smith and T. Stapleton, Feb. 8, 2007, BARC0263399-00.

Similarly, Barclays also reversed its long PV peak monthly index position to short through daily index on February 7, 2007 and through broker trades on February 9, 2007 to enable Brin to purchase dailies in the direction of Barclays' and Levine's financial swaps.[177] Upon returning to the office, Levine began trading dailies at PV peak in the same manner.[178]

On April 2, 2007, Levine appears to have made a similar request to Dhabliwala by e-mail to trade dailies against index to keep the SP to PV spread from expanding or widening:

From:	**Levine, Karen: Commodities (NYK)**
Sent:	**Monday, April 02, 2007 5:02 PM**
To:	**Dhabliwala, Monal: Commodities (NYK)**
Subject:	**More info**

Hi again, sorry I forgot to tell you what I would like to do w/ my position...I don't know why the sp/pv is trading out so wide as there's no congestion there so far but it's 4.25 bid so hopefully it doesn't move out wider...cash seems to be trading out to 5. If you can sell a bunch of index that would be good to keep the price up. As far as the midc I think it's not going to get a whole lot better the only hope for the spread tightening is that loads may be a bit lighter in sp due to the Easter Weekend. I would like to talk to you after cash tomorrow to see whatthings are looking like. Thanks again, Karen

E-mail from K. Levine to M. Dhabliwala, Apr. 2, 2007, BARC0496996.

A fair reading of this e-mail shows that Levine wanted Dhabliwala to sell physical index power to create a physical position that would need flattening in the dailies and to use that flattening to push the PV daily index settlement higher. Although Dhabliwala was in the process of leaving Barclays and does not appear to have acted on Levine's request,[179] other traders at Barclays, particularly Brin, traded the PV cash markets to move the daily index settlement higher during this month and hence appear to have acted on Levine's request.

Levine also participated in the morning discussions with Smith and Brin in which they discussed the day's upcoming cash trading.[180] Therefore, Levine would have discussed the acquisition of daily index to increase Barclays' daily cash trading volumes, trading out of daily and longer term physical positions set up in the opposite direction of

[177] Barclays Trading Data.

[178] *Id.*

[179] *See* Dhabliwala Test. at 60:8-23, 93:16-94:1; Barclays Trading Data.

[180] *Supra* note 75.

Barclays' financial swaps, the aggregation of physical positions to be traded in the cash markets by trading locations, and the allocation of those aggregated physical positions to her, Brin, and Smith. Moreover, for most of Smith's employment, Levine sat directly in front of Smith and diagonal to Brin.[181] Given the constant discussions on the desk, Levine would have been present for discussions by Brin and Smith regarding their manipulation of the cash markets as they took place.[182] Moreover, Levine testified that she participated in the discussions on the desk and hence likely would have participated in Brin and Smith's discussions.[183] Likewise, Brin and Smith were present when Levine sought to manipulate the cash markets or requested their help in manipulating. As discussed *supra* at 44-46, Brin and Smith's instant messages discuss Levine's request for them to "prop up" the MIDC off-peak market through trading dailies at a loss to benefit Levine's long MIDC off-peak financial swap position in March 2007. The statements Levine made to Brin and Smith corroborate staff's finding that Levine traded to manipulate MIDC off-peak prices in late March 2007 after purchasing two BOM financial swaps on March 20, 2007 by injecting significant buying pressure into the MIDC off-peak cash markets.[184] Staff concludes that Levine was an active participant in Barclays' manipulation.

d. Evidence of Intentional Manipulation by Scott Connelly

Staff has concluded that Barclays intentionally manipulated the settlement of daily indices to benefit financial swap positions through Connelly's trading. Connelly established most of the financial swap positions that benefited from Barclays' manipulation and many of the physical positions Barclays used to manipulate. He also directly manipulated cash trading on certain occasions.[185] Connelly's trading on February 28, 2007 for March 1, 2007 MIDC peak delivery presents a particularly strong example that demonstrates Connelly's *scienter*.

The price at MIDC in the second quarter largely depends on when the snow runoff reaches the dams in the Pacific Northwest.[186] In March 2007, Connelly was short the

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[181] *Supra* note 82.

[182] *See supra* note 80.

[183] *See supra* at 21-23.

[184] *Supra* at 25-26, 44-46.

[185] *See* Barclays Trading Data.

[186] Connelly Test. at 296:20-298:20.

SP/MIDC spread and did not expect a significant runoff to occur in March.[187] However, contrary to Connelly's position, the runoff arrived earlier than Connelly expected.[188] To prevent the significant losses that would result from having misjudged the runoff, Connelly decided to manipulate MIDC index prices higher to benefit his short position in the SP/MIDC spread.

As discussed *supra* at 24-25, Connelly traded dailies on February 28, 2007 for March 1, 2007 delivery. As a senior trader, Connelly rarely traded dailies and doing so required that he arrive at work earlier than usual.[189] Connelly began his trading by placing a reserve bid for 1050 MW/h for $61.50 at 8:12:24 AM.[190] By 8:15:21 AM, this reserve bid had been lifted in 42 separate transactions.[191] It is not surprising that market participants were happy to sell at Connelly's price because the most recent and only consummated transaction for that day had taken place one second before Connelly's reserve bid and had been at $58.[192] After Connelly exited the market, prices for dailies dropped $1.50 almost immediately and continued to decline throughout the trading session.[193] Connelly lost $44,316 trading MIDC dailies on this day. Connelly's reserve bid constituted 59% of the purchases for the first five minutes of trading, and his net purchases for the day constituted 14% of purchases on this day.

Connelly's trading of dailies on February 28, 2007 created a significant amount of discussion in the market.[194] In an instant message, Connelly's former colleague from Sempra who had instant messaged with Smith as discussed *supra* at 43, comments on the unusual behavior in the market this day. Connelly responds by making fun of a market participant who stated that he was going to report Connelly's trading to the Commission:

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[187] *Id.* at 629:2-22, 634:10-16.

[188] *Id.* at 634:10-635:5.

[189] *Supra* note 96.

[190] Barclays Trading Data; ICE Data.

[191] ICE Data.

[192] *See* ICE Data.

[193] ICE Data.

[194] *See* IM between J. Thomas and K. Levine, Feb. 28, 2007, BARC0396530-31; IM between J. Thomas and R. Smith, Feb. 28, 2007, BARC0264203-04; E-mail from S. Connelly to R. Gosney, Mar. 1, 2007, BARC0198781; IM between J. Thomas and S. Connelly, Mar. 1, 2007, BARC0090447-48.

AIM:setcjake (9:56:06 AM): http://www.sempratrading.com/disclaimer.asp

AIM:setcjake (9:56:06 AM): what a shitshow

AIM:barcapscott (9:56:58 AM): crazy - i love it

AIM:barcapscott (9:57:09 AM): your boy started crying this morning

AIM:barcapscott (9:57:28 AM): he sent me an ice message - said he wass calling ferc

AIM:barcapscott (9:57:31 AM): lol

….

IM between J. Thomas and S. Connelly, Feb. 28, 2007, BARC0090305-06.[195]

Later that day, the Sempra trader contacted Connelly again, and Connelly revealed that he was aware his trading this day could move the daily index settlement:

AIM:setcjake (12:51:30 PM): Notice: All instant messages sent to and from this buddy name will be logged by the IMAuditor and are subject to archival, monitoring, or review and/or disclosure to someone other than the recipient.

AIM:setcjake (12:51:30 PM): you going to have fun with the index all month?

AIM:barcapscott (12:52:50 PM): no - it isn't going to affect much

IM between J. Thomas and S. Connelly, Feb. 28, 2007, BARC0090353.

The Commission notified Barclays that it had begun an investigation of Barclays' Western U.S. power trading on July 3, 2007.[196] Gold was informed of the Commission's investigation on the same day.[197] Gerome was aware of the investigation by July 5, 2007 at the latest.[198] Connelly was on the desk on July 5, 2007, [199] and though he testified that he could not recall when he learned of the investigation,[200] he was the West power desk

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[195] Connelly's IM name is "barcapscott."

[196] Ltr. from M. Higgins to M. Ramirez, July 3, 2007; Ltr. from M. Ramirez to M. Higgins, July 6, 2007.

[197] Gold Test. at 95:8-96:9.

[198] Gerome Test. at 184:6-14; IM from M. Gerome to K. Levine, July 5, 2007, BARC0405506.

[199] Connelly's trading demonstrates that he was on the desk on July 5, 2007. Barclays Trading Data.

[200] Connelly Test. at 716:4-7.

head and had to be aware of the Commission's investigation at the latest by July 5, 2007. Discussions were also taking place amongst Western power traders regarding Connelly's manipulation of the indices.[201] Connelly was aware of these discussions.[202] A few days after Barclays was notified by the Commission, the Western Power Traders Forum (WPTF) newsletter called the Friday Burrito on Friday, July 6, 2007 printed an article discussing a potential manipulation of the Western U.S. power markets:

> ….
> Third, there is a specter haunting the daily screens for those trading physical power in the West. I first heard rumblings about this last March, but since then no one else brought it to my attention. This visit, however, it's clear that people were wondering about large physical positions in the day-ahead market. What the hell is going on out there? I don't know what is going on, and the worst thing possible would be one party trying to move the financial markets with large physical positions. But, there are other possible explanations, such as a swell in as-available hydropower. Alas, no one is suggesting illicit trading behavior. So, this is a puzzlement.
> ….

The Friday Burrito, July 6, 2007, BARC0196570-80, at BARC0196571.

On Sunday night, Connelly wrote Gary Ackerman, the author of the WPTF Friday Burrito, offering explanations other than manipulation for the increase in physical trading in the Western U.S:

[201] Testimony of Jeffrey Rainess (Rainess Test.) at 15:18-20:13, 59:3-61:25.

[202] *Id*. at 234:20-235:22.

From: Connelly, Scott: Commodities (NYK)
Sent: Sunday, July 08, 2007 7:20 PM
To: Gary Ackerman
Subject: Greetings

Hey Gary, Scott Connelly from Barclays.

I found your comment regarding ICE traded volumes interesting in last week's Burrito. As an active participant I have a few thoughts regarding such.

You make a comment about the number of trading floors you visited in your trip to Houston. I would suggest this is one of the very reasons we have seen an increase in the volume of power that is traded in the market. The market has blossomed with liquidity as financial institutions, hedge funds and the like have stepped into the space. I see this ultimately as a good thing for our industry and a sign of the beginning of a maturation of the market. The volume of power that trades in PJM dwarfs that of the western markets. The eastern markets are ahead of the western markets in liquidity, sophistication and overall maturation - namely because they did not suffer the setbacks that the California crisis caused those in the west.

Additionally - as the markets mature - much like in the gas markets, a main "directional" hub will develop with the rest of the locations in a geographic region being traded as a basis to the main hub. In gas we see the Henry Hub as the main repository of liquidity with the other points like Z6 in New York or Socal Border in the west being traded as a basis to the Henry Hub. The west power markets are beginning to see the same phenomenon with SP15 developing as the main hub of liquidity and Palo Verde, MidC, NP15 and others becoming basis points to SP15. The markets are more often quoted as SP/PV or SP/MC spreads than outright quotes at the individual locations. This has led or is the result of (I am not sure which) to much larger traded positions being opened at the western locations through spread positions. The spreads are typically less volatile than the outright price (although not always with the northwest hydro factor) and hence the positions get levered up in size. The result - a lot more power changes hands in the daily market. The concerns about any market manipulation should be assuaged with the higher volumes going through. At the end of the day - an entity trading in the power market that does not have any assets, has to be flat at the end of the trading session. Anything they sell, whether in the daily market of beforehand, they have to buy back. The same logic carries through to anything they buy. They cannot influence the market by withholding supply and/or changing the supply/demand dynamic in any way. For every sell/ buy from one financial institution or hedge fund to another - there is an equal and opposite position created that must be liquidated by the end of the trading session. With the opposing forces of a competitive market, the higher the volume that trades - the more likely it is that the average price of the transactions represents the value of power at that hub on that day.

The increase in the depth of liquidity is only a good thing for a supplier and/or end user. It makes it much easier and less costly for each of them to transfer or neutralize their risk if they have a deep market to move into and out of without the added cost of significantly moving it one way or another.

We should embrace the change that we have been slowly seeing as opposed to being afraid of it.

I thought I would share my thoughts with you but ask that if you choose to publish any of these that you exercise your journalist's prerogative to keep your source anonymous. If you can't please don't publish it. I would like to keep a low profile and don't want to see my name or Barclays name in print. Even if only in the Burrito.

Regards

E-mail from S. Connelly to G. Ackerman, July 8, 2007, BARC0196584.

In the subsequent edition, Ackerman published Connelly's letter, anonymously, saying that Ackerman "doubt[ed] there is a better explanation for what is going on then [sic] that."[203]

The explanations that Connelly provided for the trading that Ackerman and others were observing were false. As Brin explained, Barclays was in fact "doing phys[ical] so i [sic] am trying to drive price in fin[ancial] direction" [204] just as Ackerman suggested

[203] The Friday Burrito, July 13, 2007, BARC0197648-61, at BARC0197555.

[204] *Supra* at 47-48.

might be happening. Similarly, Levine explained that Barclays traded index "to try to protect a position, either bom or prompt."[205] Implementing the same volume trading strategy, Levine requested Dhabliwala to "sell a bunch of index … to keep the price up."[206] Smith also recorded Barclays' volume trading of dailies against index to "fuckk [sic] with," "prop up," and "crap on" the Western U.S. electricity daily indices[207] to support Barclays' financial swap positions. Connelly knew his explanations were false when he submitted them to Ackerman and asked that they be published anonymously.[208]

The physical and operational structure of the West trading desk also demonstrates Connelly's involvement in Barclays' manipulation. Connelly sat in the first of the two rows that comprised the West power desk and would have been present for many of the conversations amongst Brin, Levine, and Smith about manipulating cash trading.[209] All three of these individuals were former colleagues of Connelly from Mirant whom he had recruited to join Barclays and hence were very loyal to Connelly.[210] Moreover, Connelly established the financial swap positions and many of the longer dated physical index and term positions that were in the opposite direction of Barclays' financial swaps and that the cash traders liquidated each day in the dailies.[211] Connelly and Smith also coordinated Barclays' acquisition of SP index and sale of MIDC index for March 2007,[212] a month in which staff has concluded that Barclays traded dailies against index to manipulate the daily index settlements at both SP and MIDC.

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[205] *Supra* at 50.

[206] *Supra* at 52.

[207] *Supra* at 39-46.

[208] Connelly testified that his "whole reason d'etre for [his] job" was to "raise Barclays' profile" (Connelly Test. at 704:9-13) and that "[h]aving your name in the market was part and parcel of showing the market that you had the depth of skill set to be able to handle their business," (*id.* at 705:17-19) but was unable to provide any reason why he wished to remain anonymous or why putting his or Barclays' name on his letter "wouldn't necessarily be helpful for a branding perspective" (*id*. at 841:4-5).

[209] *Supra* notes 80, 82.

[210] *See supra* at 4-5.

[211] *See* Barclays Trading Data.

[212] IM between R. Smith and K. Brown, Feb. 27, 2007, BARC0264153-54; Smith Test. at 287:25-289:22.

As discussed *supra* at 28-35, the West power desk's dailies against index trading was producing significant losses. Connelly received aggregated P&L from his traders on a daily basis and would sometimes get real-time updates from them.[213] Connelly claimed in his testimony that he did not examine the losses his traders suffered in trading dailies but looked at their performance "holistically."[214] Connelly's testimony that he did not understand how his traders were losing money is not credible. First, as discussed *supra* at 21-23, the West power desk was in constant discussions regarding strategies and the markets. That Connelly could have avoided knowing that a substantial portion of his traders' losses were occurring from trading dailies against index in that environment is implausible. Second, the losses from the physical cash traders trading dailies against index frequently wound up in Connelly's books.[215] In the alleged manipulation months, the cash traders moved approximately $1.45 million of net cash trading losses from their trading books to Connelly's books.[216] The traders testified that they would not have traded in Connelly's books without his consent and that they would discuss movement of P&L into Connelly's books with Connelly.[217] Connelly examined his own books each day[218] and would have seen the losses in cash trading as well as the financial swap positions in his book that benefited from the cash trading. Third, in at least one communication to Gold, Connelly attributed some of Brin's losses for a day to Brin's trading dailies, and, therefore, Connelly must have reviewed Brin's trading of dailies or discussed Brin's trading with him on at least this occasion.[219] Fourth, the responsibility for monitoring P&L from cash trading belonged to Connelly.[220] Staff concludes that Connelly was not only an active participant in Barclays' manipulation but also its leader.

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[213] Connelly Test. at 534:14-20.

[214] *Id*. at 544:19-22.

[215] Brin Test. at 65:2-68:13, 105:19-110:22, 372:6-375:8; Connelly Test. at 691:24-694:1; Smith Test. at 171:9-172:9, 409:14-412:22, 424:18-425:3.

[216] Barclays Trading Data.

[217] Brin Test. at 374:12-375:17; Smith Test. at 389:20-22, 393:19-21.

[218] Connelly Test. at 532:13-533:20.

[219] Connelly Test. at 684:18-685:14. Brin also testified that he recalled Connelly inquiring about his trading of dailies. Brin Test. at 56:15-57:9.

[220] Gold Test. at 69:15-18.

e. Evidence of Intentional Manipulation from the Trading Data

Staff also concludes that the trading pattern and losses associated with Barclays' cash-against-index trading, discussed *supra* at 11-35, demonstrate that Barclays' cash trading was an intentional manipulation. In the alleged manipulation months, Barclays built physical positions and flattened those positions in the cash markets to benefit its financial swap positions. Barclays' cash trading produced significant, repeated, and avoidable losses. The pattern of Barclays trading dailies into its financial swap position and the significant losses associated with that trading show that Barclays intended to manipulate the cash markets and resulting daily indices to benefit its financial swap positions.

f. Conclusion on Intentional Manipulation

Staff concludes that the Barclays West power desk traders traded dailies to enhance the value of Barclays' financial swap positions. Connelly, Brin, Levine, and Smith intentionally traded dailies, generally at a significant loss, in a coordinated manner to benefit financial swap positions held predominately by Connelly but also by others on the desk.[221] In testimony, Connelly, Brin, Levine, and Smith did not provide any credible explanation for their conduct or inculpatory communications. The communications and data demonstrate that this practice was pervasive. Connelly, Brin, Levine, and Smith agreed to engage in a joint scheme to manipulate cash trading and the resulting daily indices throughout the Western U.S. in the alleged manipulation months, and each committed manipulative acts in furtherance of the scheme.

2. Recklessness

Scienter may also be established by proving that a respondent was reckless in his or her conduct.[222] An entity may engage in reckless conduct through willful blindness or ignorance of the effect of its actions. Recklessness may be found if there is a danger "so

[221] The Barclays Trading Data demonstrates that the majority of financial swap positions were held by Connelly.

[222] Order No. 670 at P 53 (citing *Florida State Board of Admin. v. Green Tree Fin. Corp*., 270 F.3d 645 (8th Cir. 2001); *Novak v. Kasaks*, 216 F.3d 300 (2d Cir. 2000); *In re Advanta Corp. Sec. Litig.*, 180 F.3d 525 (3d Cir. 1999); *Nathenson v. Zonagen, Inc.*, 267 F.3d 400 (5th Cir. 2001); *City of Philadelphia v. Fleming Co.*, 264 F.3d 1245 (10th Cir. 2001); *Grebel v. FTP Software, Inc.*, 194 F.3d 185 (1st Cir. 1999); *In re Comshare, Inc. Sec. Litig*., 183 F.3d 542 (6th Cir. 1999); *Bryant v. Avardo Brands, Inc.*, 187 F.3d 1271 (11th Cir. 1999); *In re Silicon Graphics Sec. Litig*., 183 F.3d 970 (9th Cir. 1999); *Sundstrand Corp. v. Sun Chemical Corp.*, 553 F.2d 1033 (7th Cir. 1977)).

obvious that the actor must have been aware of the danger."[223] Staff concludes that Barclays' conduct constitutes, at a minimum, recklessness.

Brin, Levine, and Smith compiled a breakdown of their respective P&L every day.[224] These P&L's showed the losses the Barclays cash traders were incurring through trading dailies against index, and the cash traders reviewed the performance of their cash against index trading each day.[225] The traders were aware that these transactions were going into the ICE daily indices by virtue of the transactions occurring on ICE.[226] Therefore, the cash traders would have known that their transactions were moving the ICE indices. As discussed *supra* at 59, Connelly received daily P&L numbers from his traders, and given the constant discussion on the desk, he would have been aware that they were losing substantial sums trading dailies against index. Moreover, Gold had trained all the Barclays West traders on the need to avoid uneconomic trading because it was likely unlawful[227] and had tasked Connelly with preventing uneconomic trading by Barclays in the electricity markets.[228] To the extent Connelly did not investigate to determine that his traders were losing substantial sums in trading dailies against index and moving the ICE daily index settlements, his failure to do so constitutes recklessness.

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[223] *Amaranth Advisors, L.L.C.*, 120 FERC ¶ 61,085, at P 112 (2007). *See Howard v. SEC*, 376 F.3d 1136, 1143 (D.C. Cir. 2004) (holding that severe recklessness may be found if the defendant encountered "red flags" or "suspicious events creating reasons for doubt" that should have alerted him to the improper conduct); *Wonsover v. SEC*, 205 F.3d 408, 414 (D.C. Cir. 2000); *SEC v. Steadman*, 967 F.2d 636, 641-42 (D.C. Cir. 1992) (*quoting Sunstrand Corp. v. Sun Chem. Corp.*, 553 F.2d 1033, 1045 (7th Cir. 1977), *cert. denied*, 434 U.S. 875 (1977) (recklessness is met where a company "wantonly ignored" readily available evidence of the unfairness of a proposed acquisition and therefore failed to disclose certain facts).

[224] Brin Test. at 51:7-11, 66:3-67:4, 123:2-124:3, 142:14-22; Levine Test. at 80:17-81:12; Smith Test. at 122:3-123:2.

[225] Brin Test. at 51:7-11, 66:3-67:4, 123:2-124:3, 142:14-22; Levine Test. at 80:17-81:12; Smith Test. at 122:3-123:2, 328:15-22.

[226] Brin Test. at 14:20-15:10, 79:14-24; Connelly Test. at 444:14-21; Gerome Test. at 91:8-9; Levine Test. at 9:1-10; Smith Test. at 12:20-21.

[227] Gold Test. at 111:9-16.

[228] *Id.* at 115:16-22

C. In Connection with a Jurisdictional Transaction

Staff concludes that Barclays' transactions in the cash markets during the alleged manipulation months were in connection with a jurisdictional transaction under 1c.2. The Commission has jurisdiction under the FPA over "the sale of electric energy at wholesale in interstate commerce."[229] The FPA defines a "sale of electric energy at wholesale" as "a sale of electric energy to any person for resale."[230]

Barclays' cash trading were sales for resale in interstate commerce. Because Barclays did not have generation or load, its purchases and sales of electric energy were necessarily for resale. Barclays' transactions of physical power at MIDC, PV, SP, and NP occurred on the Western U.S. electricity grid and hence were in interstate commerce.[231] Therefore, staff concludes that Barclays' transactions for physical power constituted jurisdictional transactions under the FPA.

VI. PENALTY ANALYSIS AND CONSIDERATIONS

A. Barclays

1. Civil Penalties

Barclays' violations fall under the *Penalty Guidelines*' Chapter Two category guideline for fraud (§ 2B1.1).

The Penalty Guidelines consider the gain to the organization or the loss caused by the violation. The following findings relating to the seriousness of Barclays' violations guided staff's application of the Chapter Two guidelines.

The scope of Barclays' manipulation, which involved six different products traded at four different locations throughout the Western U.S. for over two years, adds significantly to the seriousness of the violations.[232] The evidence from four different traders shows that Barclays' manipulation was coordinated and willful.

Staff finds that Barclays' violation caused an estimated $139.3 million in pecuniary losses to other market participants who held financial and physical instruments that settled off the indices in the alleged manipulation months. The pecuniary losses

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[229] 16 U.S.C. § 824(b)(1) (2006).

[230] *Id.* § 824(d) (2006).

[231] *See New York v. FERC*, 535 U.S. 1, 7 (2002).

[232] *See Penalty Guidelines* at § 2B1.1(a)(2)(F).

caused by Barclays equal the total open interest of financial and physical instruments settling against the indices multiplied by the price distortion resulting from Barclays' cash trading. The open interest is the bi-directional volume transacted by market participants; e.g., a 1000 MW/h financial swap is 1000 MW/h of open interest. Staff derived its estimate of open interest of instruments settling against the indices through two data sources. First, staff took the total open interest of financial swaps that cleared on the ICE platform.[233] Second, staff performed an estimate of the physical-market open interest by obtaining daily physical volumes bought and sold at index in the alleged manipulation months from 25 entities believed by staff to be significant Western U.S. market participants. Staff then netted the physical purchases and sales for each entity on a daily basis and separately summed the net sellers and the net buyers for that day. The larger of the two numbers represented a minimum estimate for the open interest in physical index for that day. Staff summed each day's estimated physical-index open interest with the day's open interest in ICE-cleared financial swaps to estimate the total open interest of instruments settling off of the ICE index on any given day.[234]

Staff then multiplied the open interest for a particular day against its estimate of the difference in price that resulted from Barclays' trading on that day. Staff derived its estimate of the price difference through econometric modeling of Barclays' cash trading for the products that Barclays manipulated[235] over the trading period of November 2006 to December 2008. This preliminary econometric model allows staff to estimate Barclays' change to the index settlement based on the net volume of Barclays' trading on a daily basis. Staff also used this method to calculate the benefit to Barclays' financial swaps that it should disgorge by multiplying the difference in the index that resulted from Barclays' cash trading by its financial swap position, resulting in a current estimate of $34.9 million.

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[233] ICE does not have open interest data before 2007. Therefore, staff's calculations of losses for the months of November 2006 PV peak and December 2006 NP off-peak are based exclusively on its estimate of the physical market's open interest.

[234] For example, for February 28, 2007 trade date for March 1, 2007 delivery, the ICE MIDC peak open interest was 92,400 MWh. The total of net physical index purchases from the net purchasers out of the 25 market participants was 33,408 MWh, and the total of net physical index sales from net sellers was 17,360 MWh. As the total net physical index purchases were larger than the total net physical index sales, staff added the total net physical index purchases of 33,408 MWh to the ICE open interest of 92,400 MWh to calculate a total open interest of 125,808 MWh for the day.

[235] Staff's estimate of disgorgement and pecuniary losses includes MIDC peak and off-peak, NP peak and off-peak, and SP peak. The estimate does not include PV peak, a point which staff is continuing to model.

The Penalty Guidelines consider a variety of factors to derive a culpability score. Staff made several findings related to Barclays' culpability. Staff concludes that high-level personnel at Barclays were not only involved in but designed and supervised the manipulation. As discussed *supra* at 24-25, 53-59, Connelly, Managing Director of North American Power[236] and a member of Barclays' senior management,[237] was actively involved in Barclays' coordinated manipulation of the cash markets in the alleged manipulation months. The evidence indicates that Connelly originated the scheme and instructed the traders whom he supervised to execute it. As discussed *supra* at 3-4, Barclays has approximately 140,000 employees, qualifying it for the highest level of culpability for senior management involvement in the fraud. Moreover, prior adjudication of similar misconduct by any other enforcement agency is a factor in determining culpability.[238] Barclays recently settled claims by the Commodity Futures Trading Commission and Department of Justice that it manipulated the London Interbank Offer Rate[239] during a period concurrent with its manipulation of the Western U.S. electricity markets.

Staff finds Barclays' compliance program inadequate. Although Barclays' commodities compliance department (Barclays Commodities Compliance) recognized that uneconomic trading raised serious legal and compliance issues,[240] Barclays did not have systems in place to detect those issues. Similarly, although Gold instructed traders on the importance of avoiding uneconomic trading,[241] the evidence shows that the traders on the West power desk did not follow his warning. Barclays Commodities Compliance also missed opportunities to uncover the West power desk's manipulation. Although Connelly informed Gold of the instant message threatening to report Barclays to the Commission discussed *supra* at 55,[242] Gold did not request Barclays Commodities Compliance to undertake any examination of Connelly's trading on this day but instead

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[236] Connelly Test. at 97:22-25.

[237] *Id.* at 211:1-5.

[238] *Penalty Guidelines* at § 1C2.3(c)(2).

[239] *In re Barclays Bank PLC, et al.*, Order Instituting Proceedings Pursuant to Sections 6(c)and 6(d) of the Commodity Exchange Act, as Amended, Making Findings and Imposing Remedial Sanctions, CFTC Docket No. 12-25 (CFTC June 27, 2012).

[240] *See supra* note 139; Gold Test. at 96:25-97:18.

[241] Gold Test. at 111:9-16.

[242] Gold Test. at 97:19-100:5.

relied on Connelly's assertion that his trading was proper.[243] In fact, the responsibility for detecting uneconomic trading rested not with Barclays Commodities Compliance but with Connelly.[244] Finally, staff finds that Barclays has exhibited full cooperation to date.

Based on the *Penalty Guidelines*, staff recommends a civil penalty of $435 million for Barclays, a number within the *Penalty Guidelines*' range.

2. Disgorgement

The Commission has remedial authority, deriving from Section 309 of the FPA, to require that entities that violate the FPA disgorge unjust profits gained as a result of a statutory or tariff violation.[245] Staff considers the benefit Barclays gained to its financial swap positions as a result of its manipulation of the daily index settlements to be unjust profits. As discussed *supra* at 62-63, staff's current estimate of unjust profits is $34.9 million and hence staff recommends that Barclays disgorge this amount plus interest.

B. Individual Traders[246]

Staff recommends the following civil penalties for the individual traders and believes the amounts appropriately reflect the severity of the violation and significant effect that Barclays' manipulation had on the Western U.S. markets for more than a two-year period.

1. Brin

Staff recommends a civil penalty for Brin of $1 million.

2. Connelly

Staff recommends a civil penalty for Connelly of $15 million. Staff believes that Connelly warrants this penalty as the leader of the manipulative scheme as discussed *supra* at 53-59 and the highest paid member of the scheme.

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[243] *Id.*

[244] *Id.* at 115:16-22.

[245] *Pub. Utils. Comm'n. of Cal. v. FERC*, 462 F.3d 1027, 1048 (9th Cir. 2006).

[246] The *Penalty Guidelines* do not apply to individuals. *Penalty Guidelines* at § 1A1.1.

3. Levine

Staff recommends a civil penalty for Levine of $1 million.

4. Smith

Staff recommends a civil penalty for Smith of $1 million.

VII. RECOMMENDED ACTION

Based on the above conclusions of law and fact, OE recommends the Commission issue Barclays, Brin, Connelly, Levine, and Smith an Order to Show Cause why they did not violate 1c.2 in connection with their actions detailed above for the alleged manipulation months and why they should not be subject to the following remedies and civil penalties:

Barclays:

- $34.9 million disgorgement of unjust profits plus interest
- $435 million civil penalty

Brin:

- $1 million civil penalty

Connelly:

- $15 million civil penalty

Levine:

- $1 million civil penalty

Smith:

- $1 million civil penalty

Staff also recommends the Commission make this Report public pursuant to 18 C.F.R. § 1b.9 (2012) and afford Barclays, Brin, Connelly, Levine, and Smith the opportunity to respond to staff's findings.

In accordance with 18 C.F.R. § 385.213 (2012), staff recommends that the Commission direct that:

(a) Barclays, Brin, Connelly, Levine, and Smith, within 30 days of the date of an Order to Show Cause, be required to file answers showing why they should not be found to have violated the Anti-Manipulation Rule in the alleged manipulation months.

(b) Barclays, Brin, Connelly, Levine, and Smith, within 30 days of the date of an Order to Show Cause, be required to file answers showing why the Commission should not assess civil penalties pursuant to the Commission's authority under § 316A of the Federal Power Act (16 U.S.C. 825o-1 (2006)) in the amount of $435 million for Barclays, $1 million for Brin, $15 million for Connelly, $1 million for Levine, and $1 million for Smith, and require Barclays to disgorge $34.9 million in unjust profits plus interest.

(c) OE, within 30 days of the date of Barclays', Brin's, Connelly's, Levine's, and Smith's answers, be required to answer their responses.