United States Senate
PERMANENT SUBCOMMITTEE ON INVESTIGATIONS
Committee on Homeland Security and Governmental Affairs

Carl Levin, Chairman
John McCain, Ranking Minority Member

E X H I B I T S

EXHIBITS 64-99 (Part 4 of 4)

Hearing On

Wall Street Bank Involvement With Physical Commodities

November 20 and 21, 2014

199 Russell Senate Office Building, Washington, D.C. 20510

United States Senate

PERMANENT SUBCOMMITTEE ON INVESTIGATIONS

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11-17

E X H I B I T L I S T

Hearing On

WALL STREET BANK INVOLVEMENT WITH PHYSICAL COMMODITIES

November 20 and 21, 2014

1. a. *LME Aluminum Stocks,* chart prepared by the Permanent Subcommittee on Investigations.
   b. *Metro Freight Incentives,* chart prepared by Goldman Sachs. [Source: Goldman Sachs Counsel letter to the Permanent Subcommittee on Investigations, GSPSICOMMODS00046232, included in Exhibit 39.]
   c. *Aluminum Tonnage Shipped (Metro Warehouse (Detroit) to Metro Warehouse (Detroit),* chart prepared by Goldman Sachs. [Source: Goldman Sachs Counsel letter to the Permanent Subcommittee on Investigations, PSI-GoldmanSachs-20-000002.]
   d. *Goldman Employees Who Served As Metro Board Members, 2009 to 2014*, chart prepared by the Permanent Subcommittee on Investigations.
   e. *Aluminum Merry Go Round Transactions*, chart prepared by the Permanent Subcommittee on Investigations.
   f. *Detroit Queue and Platts MW Aluminum Premium,* chart prepared by the Permanent Subcommittee on Investigations.
   g. Wentworth Ownership Structure, chart prepared by the Permanent Subcommittee on Investigations.
   h. *Overview of North America Gas, Power and PI Assets, as of 03/31/2011,* chart prepared by J.P. Morgan. [FRB-PSI-623097, included in Exhibit 58]
   i. JPMorgan internal email, dated October 2010, re: *Please sir! mor BCR!!!!*
   j. *Excerpts from 2013 CNR Financial Statement*, prepared by CNR. [GSPSICOMMODS00046374, included in Exhibit 17]
   k. *Queue Length*, chart prepared by the Permanent Subcommittee on Investigations.

Documents Related to Goldman Sachs/General:

2. Excerpts of Goldman Sachs *responses to questions from the Federal Reserve on 4(o) Commodities Activities*, dated May 26, 2011, re: 1997 v. 2010 physical commodity activities. [FRB-PSI-200600-6021, 608-610]

3. Excerpt from Goldman Sachs Presentation, *Federal Reserve Bank of New York Discovery Review: Global Commodities - US Natural Gas & Power*, dated March 2010, (*Financial vs. Physical Trades FY 2009*). [FRB-PSI-400006, 008]

4. Goldman Sachs Presentation, *Global Commodities, Presentation to the Board of Directors of The Goldman Sachs Group, Inc.*, dated October 2011, including Metro, CNR and Cogentrix highlights. [FRB-PSI-700011-030]

5. Excerpts from Goldman Sachs Memorandum, dated July 2012, re: *Firmwide Client and Business Standards Committee Meeting, (...Merchant Banking include CNR, Metro and Vale.... *** ...Nufcor - treated as part of firm's own activities).* [FRB-PSI-200984, 995-996, 1000-001]

6. Goldman Sachs Memorandum to the Federal Reserve, dated July 2013, re: commodity-related activities, including environmental/catastrophic risk. [FRB-PSI-201245-268]

7. Goldman Sachs Presentation, *Global Commodities & Global Special Situations Group, Presentation to the Board of Directors of The Goldman Sachs Group, Inc.*, dated September 2013, including Metro and CNR (short coal hedge) highlights. [FRB-PSI-400077-098]

8. *Consolidated Holding Company Report of Equity Investments in Nonfinancial Companies - FR Y-12*, dated June 30, 2014, prepared by The Goldman Sachs Group, regarding its merchant banking investments. [FRB-PSI-800013-016]

<u>Documents Related to Goldman Sachs Involvement with Uranium</u>:

9. Goldman Sachs *New Product Memorandum*, dated December 2008, re: *Uranium Trading.* [FRB-PSI-400039-052]

10. Goldman Sachs *Physical Commodity Review Committee: Meeting Minutes*, dated May 2013, re: enriched uranium (UF6). [FRB-PSI-400053-055]

11. Nufcor Organization Chart, prepared by Goldman Sachs. [GSPSICOMMODS00046240]

12. Excerpts from Goldman Sachs' counsel letter to the Subcommittee, dated October 2014, re: Nufcor, attached chart, *Nufcor Uranium Utility Supply Contracts at the time of the Nufcor Acquisition (June 30, 2009)*). [PSI-GoldmanSachs-21-000001, 004 and GSPSICOMMODS00046532-533]

<u>Documents Related to Goldman Sachs Involvement with Coal</u>:

13. CNR Organization Chart, prepared by Goldman Sachs. [GSPSICOMMODS00046318]

14. Excerpt from *Coalcorp Mining Inc., Notice of Special Meeting of Shareholders to be Held on February 11, 2010 and Management Information Circular.* [PSI-CI-01-000001-003]

15. Goldman Sachs submission to the Federal Reserve, *Report of Changes in Organizational Structure - FR Y-10*, dated April 2010, re: CNR. [GSPSICOMMODS00046301-303]

16. Excerpt from *C.I. Colombian Natural Resources I SAS and J. Aron & Company Marketing Agreement,* dated September 2011. [GSPSICOMMODS00046496-501, 509]

17. Excerpt from *C.I. Colombian Natural Resources I S.A.S, Financial Statements for the years ended on the 31st of December of 2013 and 2012 and Statutory Auditor's Report*, dated March 2014. [GSPSICOMMODS00046366-367, 373-376]

18. Excerpts from Goldman Sachs counsel letter to the Subcommittee, dated October 2014, re: CNR. [PSI-GoldmanSachs-19-000001, 004-005]

19. Goldman Sachs counsel letter to the Subcommittee, dated November 2014 *(...J. Aron acted as the exclusive marketing and sales agent for CNR....*). [PSI-GoldmanSachs-25-000001-003]

20. Goldman Sachs *Metals & Mining, Background to Environmental and Social Due Diligence,* updated 2012. [FRB-PSI-300221-230]

<u>Documents Related to Goldman Sachs Involvement with Aluminum</u>:

21. Excerpt from Goldman Sachs counsel letter to the Subcommittee, dated October 2014, including chart, *Aluminum Tonnage Shipped.* [PSI-GoldmanSachs-20-000001-002]

22. a. Invoice List of Glencore Ltd. and Red Kite Master Fund Limited. [GSPSICOMMODS00046871-872]
    b. Glencore Ltd. invoice to Metro International Trade, dated June 21, 2013, in the amount of $9,909,280.66. [GSPSICOMMODS46873]
    c. Glencore Ltd. invoice to Metro International Trade, dated June 21, 2013, in the amount of $402,190.77. [GSPSICOMMODS46874]
    d. Glencore Ltd. invoice to Metro International Trade, dated September 24, 2013, in the amount of $321,105.33. [GSPSICOMMODS46875]
    e. Red Kite Master Fund Limited invoice to Metro International Trade, dated November 13, 2012, in the amount of $5,735,700. [GSPSICOMMODS46876]
    f. Red Kite Master Fund Limited invoice to Metro International Trade, dated December 20, 2012, in the amount of $632,720. [GSPSICOMMODS46877]

g. Red Kite Master Fund Limited invoice to Metro International Trade, dated January 28, 2014, in the amount of $2,932,731.43. [GSPSICOMMODS46878]
h. Red Kite Master Fund Limited invoice to Metro International Trade, dated November 13, 2013, in the amount of $14,084,401.27. [GSPSICOMMODS46879]

23. *Warrant Finance Agreement, DB Energy Trading LLC and Metro International Trading Services, LLC*, dated September 2010. [GSPSICOMMODS00047434-447]

24. Excerpt from Goldman Sachs Presentation, *MITSI Holdings LLC, Board of Directors Meeting*, dated December 2012, slide entitled *Overview Off-warrant Deals* re: Red Kite deals. [GSPSICOMMODS00009348]

25. Metro internal email, dated November 2012, re: Detroit Ali - off warrant storage deal. [GSPSICOMMODS00046684-686]

26. Glencore/Metro email exchange, dated April 2013, re: *New Deal - Glencore Detroit (,,,all 91,000 mt for Glencore scheduled to ship outbound in May/June will do so as scheduled but will go to other Metro locations in Detroit (we of course decide) and remain off warrant until June/July 2013 at which point the material will be rewarranted.)*. [GSPSICOMMODS00046687-691]

27. Charts related to last Red Kite deal and Glencore deal, prepared by Metro for LME in 2014. [GSPSICOMMODS00046666-683]

28. Metro internal email, dated December 2010, re: *Montreal (...blocking others. *** ...Q management....)*. [GSPSICOMMODS00047422]

29. Metro internal email, dated February 2012, re: *Stemcor 12 Kt to Detroit (...queue management...)*. [GSPSICOMMODS00047423-429]

30. Metro internal email, Michael Whelan, Metro, email, dated June 2013, re: *Resignation (I have some questions and concerns regarding the Chinese Wall Policy that is in place which regulates the interaction between Metro International, its customers, and J. Aron. This morning's confrontation was extremely questionable.)* [GSPSICOMMODS00047430]

31. *Metro International Trade Services (2011-2013),* chart regarding agreements of sharing physical premiums. [GSPSICOMMODS00046531, 46630]

32. *Goldman Sachs/Metro International Trade Services, Management Brief, June 2011 (Extraordinary income from counterparties sharing physical premium with Metro...).* [GSPSICOMMODS00009668]

33. LME counsel letter to the Subcommittee, dated November 2014 (*...while the LME would view such behavior as a contravention of the "spirit" of the relevant requirements, it may be difficult to argue that it constituted a contravention of the "letter" of those requirements.*). [LME_PSI0002459-462]

34. Aluminum Users Group Memorandum, dated October 2012 (*The LME's terminal market model ... is broken.)*. [PSI-AlumUsersGroup-01-000010-012]

35. Goldman Sachs *Presentation to Firmwide Client and Business Standards Committee, Metro International Trade Services*, dated August 2011, including slide entitled, *Metro Financial Summary.* [FRB-PSI-707486-500]

36. a. Excerpt from Goldman Sachs Presentation, *MITSI Holdings LLC, Board of Directors Meeting*, dated December 2011, including slide entitled *Current Deal Pipeline*. [GSPSICOMMODS00009287, 296]
    b. Excerpts from Goldman Sachs Presentation, *MITSI Holdings LLC, Board of Directors Meeting*, dated March 2012, including slides entitled *Current Deal Pipeline* and *Overview Off-warrant Deals*. [GSPSICOMMODS00009423, 433, 437]
    c. Excerpts from Goldman Sachs Presentation, *MITSI Holdings LLC, Board of Directors Meeting*, dated December 2012, including slides entitled *Current Deal Pipeline* and *Overview Off-warrant Deals*. [GSPSICOMMODS00009332, 343, 348]
    d. Excerpts from Goldman Sachs Presentation, *MITSI Holdings LLC, Board of Directors Meeting*, dated March 2013, including slides entitled *Current Deal Pipeline* and *Metro's Annual Financial Performance*. [GSPSICOMMODS00009355, 364, 370]

37. London Metal Exchange (LME) document listing *terms and conditions applicable to all LME listed warehouse companies,* dated April 2014. [LME_PSI0001406-427]

38. a. *Conflict Management Procedures Between Metro and Other GS Businesses and Personnel, Policy Issued To: Global Commodities Sales and Trading, Global Commodities Principal Investment, Metro Board Members, Metro Management and Staff*, dated February 2010. [FRB-PSI-602457]
    b. *Information Barrier Policy: Metro and other GS Businesses and Personnel; For: Global Commodities Sales and Trading, Global Commodities Principal Investment, Metro Board Members, Metro Management and Staff*, dated March 2014. [GSPSICOMMODS00004059-076]

39. Excerpt from Goldman Sachs counsel letter to the Subcommittee, dated September 2014, including table listing *Total Annual Freight Allowance Paid by Metro and Annual Freight Allowance Paid by Metro to J. Aron.*
[PSI-GoldmanSachs-15-000001 and GSPSICOMMODS00046232]

40. Excerpts from Goldman Sachs counsel letter to the Subcommittee, dated August 2014, including list of authorized Goldman Sachs employees given access to confidential information. [PSI-GoldmanSachs-17-000001 and GSPSICOMMODS00046225-226]

Documents Related to Morgan Stanley/General:

41. Morgan Stanley Presentation, *Global Commodities Overview*, dated May 2009. [FRB-PSI-618889-908]

42. Morgan Stanley Presentation, *Morgan Stanley Commodities, Business Overview*, dated February 2013, prepared for the Permanent Subcommittee on Investigations. [PSI-MorganStanley-01-000001-027]

43. *Consolidated Holding Company Report of Equity Investments in Nonfinancial Companies - FR Y-12*, dated June 30, 2014, prepared by Morgan Stanley, regarding its merchant banking investments. [FRB-PSI-800009-012]

Documents Related to Morgan Stanley Involvement with Natural Gas:

44. Excerpt from Morgan Stanley Presentation, *Federal Reserve Bank of New York, Morgan Stanley Infrastructure Platform Review*, prepared by Morgan Stanley, dated September 2013.
[FRB-PSI-400321-329, 331–333, 341, 351-352, 365-366]

45. a. *Application of Wentworth Gas Marketing LLC for Long-Term Authorization to Export Compressed Natural Gas*, submitted to the Department of Energy, Office of Fossil Energy, dated May 2014.
    b. *Department of Energy, Office of Fossil Energy,* In re Wentworth Gas Marketing LLC*, Order Granting Long-term Authorization To Export Compressed Natural Gas,* dated October 2014. [PSI-DOE-01-000004-016]

46. Excerpt from Morgan Stanley Presentation, *Morgan Stanley Infrastructure Partners, Overview of Southern Star*, dated August 2014.
[MS-PSI-00000001-016, 019-020. 023-027, 035, 037]

47. Morgan Stanley counsel letter to the Subcommittee, dated September 2014, re: *Morgan Stanley's purchase of the Deutsche Bank natural portfolio and involvement with Wentworth Holdings LLC.* [PSI-MorganStanley-13-000001-009]

48. Excerpt from Morgan Stanley Presentation, *Morgan Stanley Infrastructure Partners, Southern Star Followup Questions*, dated October 2014.
[MS-PSI-00000455-460, 465-469, 472-475]

<u>Documents Related to Morgan Stanley Involvement with Crude Oil</u>:

49. Excerpts from Morgan Stanley counsel letter to the Subcommittee, dated October 2014, re: early New York oil storage. [PSI-MorganStanley-17-000001-002]

50. Excerpts from Morgan Stanley counsel letter to the Subcommittee, dated June 2013, re: TransMontaigne. [PSI-MorganStanley-06-000001-004]

51. Excerpts from Morgan Stanley counsel letter to the Subcommittee, dated October 2014, re: oil storage data, revenue, and Olco Petroleum Group. [PSI-MorganStanley-19-000001-003]

<u>Documents Related to Morgan Stanley Involvement with Jet Fuel</u>:

52. Excerpts from *Jet Fuel Supply Agreement between Morgan Stanley Capital Group Inc. and United Airlines, Inc. and United Aviation Fuels Corporation*, dated September 2003. [PSI-UnitedAirlines-01-000003, 013, 016, 020-022]

53. Morgan Stanley counsel letter to the Subcommittee, dated September 2014, re: Emirates. [PSI-MorganStanley-15-000001-004]

54. Emirates counsel letter to the Subcommittee, dated October 2014, re: jet fuel purchases and hedges. [PSI-Emirates-01-000001-004]

55. Emirates counsel letter to the Subcommittee, dated October 2014, re: jet fuel purchases and hedges. [PSI-Emirates-02-000001-007]

<u>Documents Related to JPMorgan Chase/General</u>:

56. a. *Notice to the Board of Governors of the Federal Reserve System by JPMorgan Chase &* Co., submitted July 21, 2005, requesting complementary authority for physical commodity activities. [PSI-FederalReserve-01-000004-028]
    b. *Notice to the Board of Governors of the Federal Reserve System by JPMorgan Chase &* Co., submitted November 25, 2008, requesting complementary authority for refining activities. [PSI-Federal Reserve-01-000553-558]

57. Federal Reserve letter to JPMorgan Chase, dated April 9, 2009, granting complementary authority re: refining activities. [PSI-FRB-11-000001-002]

58. JPMorgan Presentation, *Global Commodities – Operating Risk,* dated April 2011. [FRB-PSI-623086-127]

59. JPMorgan Chase physical inventory positions, 2008-2012. [JPM-COMM-PSI-000015-016]

60. *Merchant Banking Investment in Henry Bath,* undated, prepared by JPMorgan. [FRB-PSI-000580-582]

61. Excerpt from JPMorgan Presentation, *Commodities Physical Operating Risk, Update to CIBRC*, dated January 2013, with slide entitled *Physical Operating Risk Review of Project Liberty*. [FRB-PSI-301379, 381]

62. *Consolidated Holding Company Report of Equity Investments in Nonfinancial Companies - FR Y-12*, dated June 30, 2014, prepared by JPMorgan, regarding its merchant banking investments. [FRB-PSI-800005-008]

63. Excerpts from *Global & Regional Investment Bank League Tables – 1H2014*, dated September 2014, prepared by Coalition Analytics Intelligence. [PSI-Coalition-01-000019-021]

64. JPMorgan Chase counsel letter to the Subcommittee, dated June 2014, re: J.P.Morgan Ventures Energy Corporation (JPMVEC). [PSI-JPMC-11-000001-002]

65. JPMorgan Chase counsel letter to the Subcommittee, dated October 2014, re: JPMVEC and Project Liberty. [PSI-JPMorganChase-14-000001-009]

66. JPMorgan Chase counsel letter to the Subcommittee, dated October 2014, re: various commodity issues. [PSI-JPMorgan-15-000001-008]

<u>Documents Related to JPMorgan Chase Involvement with Electricity</u>:

67. *Power Plans Owned or Controlled via Tolling Agreements, 2008 to present*, chart prepared by JPMorgan. [JPM-COMM-PSI-000022-025]

68. Federal Reserve Bank of New York letter to JPMorgan, dated March 2008, granting 2-year grace period for power plants and other assets acquired from The Bear Stearns Companies Inc. [FRB-PSI-900001-003]

69. Excerpts from JPMorgan Presentation, *Global Commodities Deep Dive Risk Review*, dated October 2009. [FRB-PSI-200634-638, 640-642, 644-645, 649-655]

70. a. *Notice to the Board of Governors of the Federal Reserve System by JPMorgan Chase &* Co., submitted December 30, 2009, requesting complementary authority for energy management activities. [PSI-FederalReserve-01-000561-567]
    b. *Notice to the Board of Governors of the Federal Reserve System by JPMorgan Chase &* Co., submitted December 30, 2009, requesting complementary authority for tolling activities. [PSI-FederalReserve-02-000012-059]

71. JPMorgan letter to the Federal Reserve, dated February 2010, requesting extension and additional complementary authority. [FRB-PSI-300286-290]

72. Federal Reserve letter to JPMorgan, dated June 2010, granting complementary authority regarding power plants. [FRB-PSI-302571-580]

73. JPMorgan *Transaction Overview*, dated August, 2010, regarding purchase of Kinder Morgan Power Plant. [FRB-PSI-300066]

74. Undated document prepared by JPMorgan regarding power plant restructuring. [FRB-PSI-300352-353]

75. JPMorgan Presentation, *Commodities Operational Risk Capital*, dated May 2011. [FRB-PSI-300727-736]

76. JPMorgan internal email, dated April 2010, re: *Resume for Power*, attaching resume of John Howard Bartholomew (*Identified a flaw in the market mechanism Bid Cost Recovery that is causing the CAISO to misallocate millions of dollars.)*. [PSI-FERC-02-000009-010]

77. JPMorgan internal email, dated October 2010, re: *Please sir! mor BCR!!!!* [PSI-FERC-02-000042]

78. JPMorgan internal email from Francis Dunleavy to Blythe Masters, dated March 2011, re: *CAISO update (I will handle it but it may not be pretty.)*. [PSI-FERC-02-000067]

<u>Documents Related to JPMorgan Chase Involvement with Copper</u>:

79. JPMorgan Presentation, *JPM Commodity Capabilities*, dated January 2012. [FRB-PSI-200832-865]

80. Excerpt from JPMorgan Presentation, *FED/OCC Quarterly Meeting*, dated February 2013, including slide entitled, *Physical Inventory Limits from FED & OCC*. [FRB-PSI-301443, 447]

81. Federal Reserve email to the Subcommittee, dated October 2014, re: treating copper as "bullion." [PSI-FRB-16-000001]

82. JPMorgan counsel email to the Subcommittee, dated October 2014, re: metals trading desk. [PSI-JPMorgan-16-000001]

83. JPMorgan cou.0nsel letter to the Subcommittee, dated October 2014, re: JPMorgan copper activities. [PSI-JPMorgan-18-000001-008 and JPM-COMM-PSI-000064-066]

84. OCC Interpretive Letter No. 553, dated May 1991, re: treating platinum as bullion. [PSI-OCC-01-000112-113]

85. OCC Interpretive Letter No. 693, dated November 1995, re: treating copper bullion. [PSI-OCC-01-000135-141]

86. a. Comment Letter of Senator Carl Levin to the Securities and Exchange Commission, dated, July 2012, re: *JPM XF Physical Copper Trust Pursuant to NYSE Area Equities Rule 8.201.*
    b. Comment Letter of Senator Carl Levin to the Securities and Exchange Commission, dated, March 2013, re: *JPM XF Physical Copper Trust, Form S-1 Registration Statement.*

87. Comment Letter of law firm representing cooper fabricating companies to the Securities and Exchange Commission, dated July 2012, re: rule change allowing copper ETF. [PSI-VandenbergFeliu_to_SEC(July2012)-000001-005]

88. LME email to the Subcommittee, dated November 2014: re: LME's public Warrant Banding Report dated December 15, 2010. [PSI-LME-06-000001]

Documents Related to JPMorgan Chase Involvement with Size Limits:

89. *Methodology for Calculating Capacity Payments for Purposes of 5% Limit*, undated, prepared by JPMorgan. [FRB-PSI-300345-347]

90. Excerpt from JPMorgan Presentation, *FED/OCC/FDIC Quarterly Meeting*, dated September 2013, *Physical Inventory Limits from FED & OCC.* [FRB-PSI-301383, 387]

91. Excerpt from JPMorgan Chase counsel letter to the Subcommittee, dated October 2014, including chart with inventory levels for copper, platinum, and paladium as of September 28, 2012 held by JPMorgan Chase Bank. [PSI-JPMorgan-15-000001 and JPM-COMM-PSI-000049]

92. JPMorgan internal email, dated January 2012, re: *Consolidated OCC Summary 10 Jan 2012*, providing inventory levels for metals held by JPMorgan Chase Bank. [OCC-PSI-00000336]

93. JPMorgan internal email, dated January 2012, re: *Consolidated OCC Summary 19 Jan 2012* (*...took further action yesterday to lend 100k tonnes of materials to the market as well as sell 400k tonnes of material to JPMVEC.*). [OCC-PSI-00000344]

94. JPMorgan internal email, dated January 2012, re: *Consolidated OCC Summary 19 Jan 2012 (It will not happen again that you learn about it after the fact when it is an issue within our control.)*. [OCC-PSI-00000340]

95. JPMorgan internal email, dated February 2012, re: *5% Limit Calculation (Following are our current and proposed methodologies for calculating the* [OCC] *5% limit.)*. [OCC-PSI-00000324]

96. JPMorgan Chase counsel email to the Subcommittee, dated November 2014: re: *JPMCB's daily aluminum inventory values and the corresponding LME cash price for aluminum*. [PSI-JPMorgan-23-000001]

97. Excerpt from JPMorgan Chase counsel letter to the Subcommittee, dated October 2014, re: aluminum trades and 5% limit. [PSI-JPMorgan-17-000001-002]

98. Excerpt from JPMorgan Chase counsel letter to the Subcommittee, dated November 2014: re: JPMCB aluminum holdings. [PSI-JPMorgan-19-000001-003]

99. a. Metro legal counsel letter to LME, dated January 27, 2014. [GSPSICOMMODS00046661-665]
    b. Metro legal counsel letter to LME, date April 15, 2014. [GSPSICOMMODS00046834-848]

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June 5, 2014

VIA HAND DELIVERY

The Honorable Carl Levin
Chairman
Permanent Subcommittee on Investigations
Committee on Homeland Security & Government Affairs
United States Senate
Russell Senate Office Building, SR-199
Washington, DC 20510

Re: JPMorgan Chase & Co's April 23, 2014 Briefing Follow-Up

Dear Chairman Levin:

On behalf of JPMorgan Chase & Co ("J.P.Morgan"), I write in connection with your questionnaire dated January 11, 2013 regarding physical commodities. As you know, on April 23, 2014, J.P.Morgan provided a briefing to Subcommittee staff, during which your staff posed a number of additional questions. This submission includes certain information responsive to these questions, and J.P.Morgan is working to provide your staff with the balance of the follow-up information requested. Responses to certain of the specific follow-up questions are as follows:

Question: Your staff asked for the name of the individual in charge of J.P. Morgan Ventures Energy Corporation ("JPMVEC").

Response: John Anderson is the Chief Executive Officer of JPMVEC.

Question: Your staff asked about J.P.Morgan's ownership interest in the London Metal Exchange ("LME").

Response: J.P.Morgan previously held an approximately 11% stake in the LME through JPMorgan Metals Limited. This stake was sold to the HK Exchange when it bought the LME in June of 2012. J.P.Morgan currently has no investment in the LME.

Permanent Subcommittee on Investigations
EXHIBIT #64

Question: Your staff asked for a copy of J.P.Morgan's policy regarding information barriers between J.P.Morgan and Henry Bath.

Response: Please refer to the enclosed copy of the current policy marked as JPM-COMM-PSI-000026 – JPM-COMM-PSI-000042.

Question: Your staff asked whether One Equity Partners ("OEP"), J.P.Morgan's private investment arm, took outside investor money related to its investments.

Response: Third party investors have not invested in OEP. As discussed with Subcommittee staff, certain J.P.Morgan employees have at times co-invested in the fund.

Redacted By

Permanent Subcommittee on Investigations

Please let me know if you have any questions.

Sincerely,

Steven R. Ross
Counsel for JPMorgan Chase & Co

Enclosure

cc: The Honorable John McCain, Ranking Member

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October 6, 2014

VIA HAND DELIVERY

The Honorable Carl Levin
Chairman
Permanent Subcommittee on Investigations
Committee on Homeland Security & Government Affairs
United States Senate
Russell Senate Office Building, SR-199
Washington, DC 20510

Re: JPMorgan Chase & Co's Responses to Follow-Up Questions

Dear Chairman Levin:

On behalf of JPMorgan Chase & Co ("J.P.Morgan"), I write in connection with your questionnaire dated January 11, 2013 regarding physical commodities. This submission includes further information responsive to additional questions posed by your staff on September 12, 2014. As discussed with your staff, J.P.Morgan is working to provide the balance of the follow-up information requested. Please note that J.P.Morgan is in the process of collecting documents responsive to certain of the Subcommittee's questions below. Responses to the specific questions are as follows:

Question 18: Please provide a description and brief history of Project Liberty and its current status.

Response: On September 8, 2012, J.P. Morgan Ventures Energy Corporation ("JPMVEC") closed a crude oil and refined product intermediation transaction, referred to as Project Liberty. The project involved a Refinery located in Philadelphia, Pennsylvania that was wholly owned by Sunoco Inc. ("Sunoco"). The Refinery, which processed 330,000 barrels per day of crude oil, was about to be closed, with 800 workers about to lose their jobs. Project Liberty was a coordinated effort to save the Refinery and the jobs of the Refinery workers, an effort that received a tremendous amount of support at the state and local levels (*see*, e.g., Mark Maremont, "White House Worked with Buyout Firm to Save Plant," WALL STREET JOURNAL, Aug. 21, 2012). Instead of closing, the Refinery was acquired by Philadelphia Energy Solutions Refining and Marketing ("PESRM"), a joint venture formed by the Carlyle Group ("Carlyle") and

Sunoco. PESRM was able to take advantage of various incentives offered by local, state and federal governments to enhance the economics of operating the Refinery, and it committed to make various upgrades. Government officials highlighted this transaction as a win for both labor and energy efficiency, in saving jobs and reducing energy costs.

The particulars of the PESRM arrangement are as follows:

- in return for a 67% majority interest in the joint venture, Carlyle contributed $175 million of equity to fund future capital projects, facility upgrades and enhance the Refinery's working capital;
- Sunoco contributed its Philadelphia Refinery assets to the joint venture in exchange for a non-operating minority interest;
- as the majority shareholder, Carlyle oversees day-to-day operations, and it has retained a controlling position and hired an experienced management team for the Refinery;
- key personnel at the Refinery were retained to maintain the required knowledge base and continuity of operations.

J.P.Morgan helped facilitate the acquisition by providing PESRM with intermediation in the form of a Supply and Offtake Agreement, pursuant to which JPMVEC became the exclusive supplier to PESRM of 100% of the Refinery's crude oil and non-crude feedstock requirements on a "just-in time" basis, and the purchaser of the majority of the refined products on an "as-they-are-produced" basis. The agreement had a term of five years, cancellable by either party on notice at the end of year three or four. Under the arrangement, JPMVEC purchases the crude oil from third parties, and sells the refined products to third parties (*see* additional information in response to Question 24 below), in each case at the direction of PESRM, subject to JPMVEC's legal, credit and country risk concerns. Initially, approximately 50% of the refined products produced were to be sold by JPMVEC to Sunoco to supply its retail network.

In connection with the intermediation, JPMVEC has leased and/or subleased approximately 14.5 million barrels of storage capacity for crude oil and refined products on and around the Refinery premises (from PESRM, Sunoco and certain other facility owners), and has contracted for access to inter- and intra-refinery pipelines, docks, time-chartered vessels, and other related infrastructure.

Under the arrangement, JPMVEC has received: through-put fees charged to PESRM based upon the volume of crude oil purchased for sale to PESRM and refined products bought from PESRM; and a working capital fee calculated upon the usage of the balance sheet (the inventory net of third party payables) on crude oil and refined products. Additionally, there is a cover transaction fee charged on the sale of crude to third parties or the purchase of refined products from third parties at PESRM's request.

JPMVEC is indemnified by PESRM for all appropriate expenses incurred in connection with the intermediation (e.g., transportation costs, demurrage costs, letters of credit costs, volumetric gains and losses, etc.).

J.P.Morgan is currently in the process of selling the Supply and Offtake Agreement.

Question 19: Please provide a list of the entities related to Project Liberty, a brief description of their roles, and JPMorgan's ownership interests in each such entity.

Response: There are two J.P.Morgan entities related to Project Liberty. As set forth in more detail above in response to Question 18, JPMVEC provides the intermediation. Separately, JPMorgan Chase Bank, N.A. provided PESRM with a bilateral liquidity facility in the form of a $100 million asset-based lending revolver for working capital and other purposes, secured against certain inventory not intermediated by JPMVEC (i.e., intermediates).

Question 20: Please describe the internal review and approval process for Project Liberty, including the roles of "IB Environmental Risk Group, RRC, and GCG Operating Risk Committee." Please provide copies of the key documents related to Project Liberty's review and approval process, including the document describing and approving the project.

Response: J.P.Morgan undertook a robust internal review of Project Liberty. As with any project of this size and complexity, that review included specific consideration by, and approvals and input from, senior management and multiple control functions. Specifically, Project Liberty was evaluated and approved by the North America ("N.A.") Reputation Risk Committee, the IB Environmental Risk Group (through its participation in the N.A. Reputation Risk Committee process), and the Global Commodities Group ("GCG") Operating Risk Committee. In addition, the various control functions (including Credit, Market Risk, Operations, Accounting/Finance, Compliance, Legal, Trading Assistants, Logistics, Technology, Tax, and Insurance) were involved in the approval process and worked with the deal team for months leading up to the transaction's approval and closing. The deal was also reviewed extensively by GCG senior management, who was actively involved in the consideration and negotiation of the deal.

Within GCG, new business opportunities involving physical commodities undergo formal diligence and review to specifically consider physical risk (the "New Business Initiative Approval" or "NBIA" process). In the case of Project Liberty, the physical components of the transaction had already been contemplated, approved, and routinely undertaken by GCG, and thus did not necessitate the NBIA process. Nonetheless, all new transactions are evaluated when they include any physical commodity components pursuant to GCG's standard diligence and risk assessment practices. In the case of Project Liberty, J.P.Morgan evaluated the various areas of potential risk (including credit, reputation, operating, and environmental risks), determined that the physical oil products and related policies/processes involved fell within the scope of GCG's existing business operations (referred to as "business-as-usual"), and approved the transaction.

The following key approvals/assessments were made in connection with the transaction's closing in September 2012:

- **Credit Approval:** A credit approval package was prepared in August 2012 approving a crude intermediation facility and a five-year asset-based lending facility.

- **Large Structured Deal Template:** As is common for large structured transactions, the control functions and the deal team contributed to an August 2012 Large Structured Deal Template, which was reviewed and approved by the senior management of GCG.

- **N.A. Reputation Risk Committee Approval:** The N.A. Reputational Risk Committee reviews imminent, existing, or prospective transactions, activities and client relationships of or undertaken by the Corporate & Investment Bank as agent or principal, which, in the opinion of the relevant business head, have the potential for reputation risk. On September 5, 2012, the N.A. Reputation Risk Committee (including a representative from the IB Environmental Risk Group, which has a standing seat on the N.A. Reputation Risk Committee) was briefed on Project Liberty and considered several reputation issues related to the project. The N.A. Reputation Risk Committee approved the transaction with several conditions, including enhanced due diligence for crude oil suppliers, country risk process controls and limits, client accounting approval, and internal senior management approval for a consultancy agreement with PESRM in connection with scheduling and operational services.

- **GCG Operating Risk Committee Approval:** The GCG Operating Risk Committee provides senior business oversight and reviews new activities that have operating risk, sets physical risk policies, and approves insurance coverage. On September 6, 2012, the GCG Operating Risk Committee was briefed on Project Liberty and considered several issues related to the project. These considerations included: that the physical oil products and activities contemplated under the deal were "business-as-usual" under existing J.P.Morgan policies and processes; that any vessels in use by Sunoco and to be used by J.P.Morgan had been vetted and approved (*see* response to Question 27, below);

that the tanks and infrastructure had been inspected and found to be suitable for use (*see* response to Question 27, below); that scheduling expertise would be provided by PESRM; that certain crude oil shipments from "strict liability" jurisdictions had been evaluated (*see* response to Question 25, below); and that the project had been reviewed and approved by the IB Environmental Risk Group and the N.A. Reputation Risk Committee (as described above). The GCG Operating Risk Committee determined that the elements of the transaction were generally "business-as-usual," and it approved moving forward with the transaction.

In several additional meetings, the GCG Operating Risk Committee also discussed the sourcing of crude oil from "strict liability" jurisdictions (an issue discussed below in response to Question 25) and considerations related to the Ponciana barge (as discussed below in response to Question 27).

- **Close-Out Analysis:** A close-out analysis was prepared by the GCG Structured Transactions team and the credit risk team as part of the transaction's overall diligence and analysis of the risk that was done, including an analysis to estimate the cost of removing the tank heel volumes at the Refinery in the event of a total shutdown.

Question 21: Please provide a list of assets within Project Liberty, including any management agreements, physical inventories, supply or offtake contracts, and other assets.

Response: With respect to PESRM's physical inventory, please refer to the enclosed list of products as of June 30, 2014, marked as JPM-COMM-PSI-000043 to JPM-COMM-PSI-000044.

The primary agreements that established the intermediation arrangement were:

- the Supply and Offtake Agreement with JPMVEC discussed above in response to Question 18 (and any related amendments, side letters, or waivers);
- UCC-1 Financing Statements;
- Guarantee (and any related amendments);
- Inventory Sales Agreement;
- Sunoco R&M Master Confirmations (for in-transit and not-in-transit transactions);
- SIL Master Confirmation (not in-transit transactions);
- Intercreditor Agreement (and any related amendments);
- Terminaling, Transportation and Storage Services Agreement;
- Consulting Agreement (and any related amendments); and
- PES Intercreditor Agremeent.

Question 22: Please indicate what legal authority is being relied upon by JPM for engaging in Project Liberty, including whether it is merchant banking authority or some other basis.

Response: Project Liberty is not a merchant banking investment. Rather, JPMVEC provides intermediation to PESRM pursuant to complementary authority granted to JPMVEC by the Board of Governors of the Federal Reserve System under Federal Reserve Regulation Y.

Question 23: Please confirm that JPMorgan is obligated to provide 100% of the crude oil needed for Project Liberty, describe how JPMorgan obtains that oil, the approximate volume of crude oil provided on a monthly basis, and the top three sources of the crude oil obtained by JPMorgan over the last year.

Response: Pursuant to the terms of the Supply and Offtake Agreement, JPMVEC is obligated to provide 100% of the crude oil needed by the Refinery. Under the arrangement, and as discussed above in response to Question 18, JPMVEC sources crude oil at the direction of PESRM, subject to J.P.Morgan's legal, credit and country risk concerns. On average, approximately eight million barrels of crude oil were sold by JPMVEC to the Refinery per month over the last year. The top three sources of the crude oil obtained over the last year are: Merrill Lynch Commodities, Statoil Marketing & Trading (US) Inc., and Socar Trading SA.

Question 24: Please explain what products are produced by the refinery associated with Project Liberty and the extent to which JPMorgan or unrelated third parties have purchased each of those products for each month of the project's existence through June 30, 2014.

Response: JPMVEC purchases virtually all of the products produced by the Refinery. JPMVEC then, in turn, sells the products to PESRM and Sunoco (which is an affiliate of PESRM), as well as other third parties. Please refer to the enclosed lists of (a) products and (b) third-party purchasers, from the commencement of Project Liberty through June 30, 2014, marked as JPM-COMM-PSI-000045 to JPM-COMM-PSI-000047.

Question 25: Please describe all insurance coverage JPM has regarding Project Liberty, including any deductions, caps, or exclusions.

a. What are "strict liability jurisdictions," and how did they affect Project Liberty?

b. Did JPM acquire additional insurance for those jurisdictions? If so, please provide details.

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Question 26: Please provide descriptions of, and documents related to, any risk assessments made by JPMorgan related to the storage, transportation, or production of crude oil and refined products related to Project Liberty.

Response: Please see the above response to Question 20.

Question 27: Please describe the use of a barge named "Ponciana" in Project Liberty and any concerns about its operations and insurance coverage.

Response: The Ponciana is the exclusive tank barge used to move liquefied gas (butanes) from the Refinery to a storage facility in Marcus Hook, Pennsylvania, and back to the Refinery. Since September 2012, on average, the Ponciana has been used approximately twice per month for these voyages. The Ponciana is chartered by TTMI Sarl, a subsidiary of JPMVEC through which J.P.Morgan entities charter vessels to move crude oil and other products, on a Contract of Affreightment basis. Fees for usage of the barge are invoiced by PESRM to TTMI Sarl, and in turn by TTMI Sarl to JPMVEC. These fees are subsequently reimbursed by PESRM to JPMVEC, along with other reimbursable fees described above in response to Question 18.

In 2012, the vetting specialist Atlantic Technical Management determined the Ponciana to be in very good condition and also determined that the Ponciana had demonstrated capable and stable operations and crewing. In September 2012, the Ponciana received an exception from GCG's Vessel Chartering and Vetting Policy for Wet Freight (discussed below in response to Question 28), given that the vessel's age was one year beyond the age specified by the policy for barges carrying liquid cargoes. The Operating Risk Committee, via a process specifically contemplated by the Vetting Policy, approved this exception on September 6, 2012, initially for 30 days and subsequently for six consecutive six month periods. As a condition to this exception, the Ponciana must undergo and pass an inspection every six months. The vessel was satisfactorily inspected by Atlantic Technical Management in September 2012, December 2012, June 2013, December 2013, and June 2014.

Question 28: Please describe the process used to "vet" or perform due diligence regarding the risks related to Project Liberty.

Response: As set forth above in response to Question 20, Project Liberty was reviewed and approved through an extensive, months'-long process that involved GCG's senior management, numerous control functions, and multiple risk committees. Alongside this approval process for the transaction, GCG has additional procedures in place to ensure further vetting when necessary, including policies that govern vessel chartering and vendor management. For example, and as discussed above in response to Question 27, GCG's Vessel Chartering and Vetting Policy for Wet Freight was used to evaluate the Ponciana barge chartered in connection with Project Liberty. Of note, when this policy was independently reviewed, it was determined to be a best-in-class policy in the industry. In addition, GCG maintains a Physical Vendor Management Policy, which governs the suitability and inspection of storage tanks. In accordance with that policy, on-site

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tank inspections were conducted by Oil Inspections, Inc. in 2012, and all tanks and infrastructure were found to be suitable for use.

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Please let me know if you have any questions.

Sincerely,

Steven R. Ross
Counsel for JPMorgan Chase & Co

cc: The Honorable John McCain, Ranking Member

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October 21, 2014

VIA HAND DELIVERY

The Honorable Carl Levin
Chairman
Permanent Subcommittee on Investigations
Committee on Homeland Security & Government Affairs
United States Senate
Russell Senate Office Building, SR-199
Washington, DC 20510

Re: JPMorgan Chase & Co's Responses to Follow-Up Questions

Dear Chairman Levin:

On behalf of JPMorgan Chase & Co ("J.P.Morgan"), I write in connection with your questionnaire dated January 11, 2013 regarding physical commodities. This submission includes information and documents responsive to additional questions posed by your staff on October 13, 2014. As discussed with your staff, J.P.Morgan is working to provide the balance of the follow-up information requested. Responses to the specific questions are as follows:

Question 1: Please provide the total dollar value of the consolidated physical commodities holdings of JPMorgan (including those held in the bank) as of 9/30/2014. This should include both (i) total physical inventory of JPMVEC and (ii) base metals held in the bank. Please provide the consolidated tier 1 capital as of the same date.

Response: Please refer to the enclosed chart, marked as JPM-COMM-PSI-000048.

Question 2: Please provide the total dollar amount of each of platinum, palladium, and copper held by the bank as of 9/28/2012 and 9/30/2014.

Response: Please refer to the enclosed chart, marked as JPM-COMM-PSI-000049.

Question 4: Please confirm that JPMorgan started providing the Federal Reserve staff with "regular reporting of its compliance with the 5% limit" in 2011. Please provide the date of the first such regular report, the frequency of such reporting, and describe how and by whom the report is prepared.

Response: J.P.Morgan's inventory value data related to the Federal Reserve's limit is compiled by the relevant product controllers for each line of business, and then provided weekly by the product controllers to the External Reporting Group within the Global Commodities Group ("GCG"). This group compiles and reviews all data before providing the month's data to the Federal Reserve in the middle of each month. In the past, this report had been provided to individuals at the Federal Reserve by email. Currently, and since May 2014, reports are uploaded to a SharePoint site to which the Federal Reserve has access.

J.P.Morgan is working to confirm the date of its first report to the Federal Reserve. However, we note that the monthly data report (supplied to the Federal Reserve since at least 2011) contains, in addition to the new month's data, historical data dating back to January 2011.

Question 5: Please indicate whether JPM had long term fuel supply contracts with any of the power plants it owned or controlled, which power plants were involved, and the tenor of those contracts.

Response: In addition to any tolling agreements reflected in the chart provided by J.P.Morgan marked as JPM-COMM-PSI-000022 to JPM-COMM-PSI-000025 and referenced below in Question 13 (which are essentially agreements to supply gas and buy the power), J.P.Morgan has a two-year capacity purchase contract to fulfill a Southern Maryland Electric Cooperative capacity sale in connection with the Panda Brandywine tolling agreement. Separately, with respect to three power plants J.P.Morgan acquired from Bear Stearns in 2008 and subsequently sold (OLS Camarillo, OLS Chino, and Carson Cogeneration), J.P.Morgan had fuel supply contracts for these plants.

Question 6: Please confirm that Global Commodities Principal Investments is a unit within the JPMorgan Global Commodities Group, and it holds the ownership interests in the Panda, Kinder and Central Power plants. Please indicate whether GCPI is using JPMVEC or another entity, such as J.P. Morgan Asset Management Holdings, Inc., to hold those interests.

Response: Principal Investments is a line of business within GCG. The investments in the Kinder Jackson power plant, Panda Brandywine toll, and Central Power & Lime biomass facility have been (and currently are) held by subsidiaries of JPMVEC.

Question 8: Please confirm that, during the two-year grace period that JPMorgan held the power plants it acquired from Bear Stearns, 2008-2010, it did not include them when calculating the holding company's compliance with the Federal Reserve's 5% complementary authority limit.

Response: That is correct. As specified by the Federal Reserve Bank of New York on March 16, 2008, assets or activities acquired from Bear Stearns that J.P.Morgan was not then permitted to own or engage in were treated as permissible assets or activities for a period of two years.

Question 9: Please indicate what JPMorgan entity, such as JPMVEC, owns Virginia Port Partners LLC, which made the $3 billion bid on the contract to operate the container terminal at Hampton Roads shipping port in Virginia.[1]

Response: Neither JPMVEC nor any J.P.Morgan entity owns or owned Virginia Port Partners LLC. Virginia Port Partners LLC was a consortium comprised of (1) JPMorgan IIF Acquisitions LLC, and (2) RREEF, a division of Deutsche Bank AG. In 2012, the consortium made a $3 billion bid on the contract to operate the port of Virginia, which would have included working with the Commonwealth of Virginia and the Virginia Port Authority to establish a partnership in order to assist the Commonwealth in its long-term goals of creating the leading container port in the Mid-Atlantic, promoting job growth, and fueling economic development.

JPMorgan IIF Acquisitions LLC refers to a special purpose vehicle related to the Infrastructure Investments Fund ("IIF"). As discussed below in response to Question 10, the IIF is a fund advised by JPMorgan Investment Management Inc.; J.P.Morgan, including JPMVEC, does not hold any investment in the IIF, and its general partners are controlled by unaffiliated third parties. In other words, there was no J.P.Morgan capital invested in Virginia Port Partners LLC.

Question 10: Please confirm that JPMorgan has an infrastructure investment fund and, please provide the name of the fund, where it is in the corporate structure, the dollars raised, and any commodity-related investment projects.[2]

Response: Within J.P.Morgan's Asset Management arm, the Global Real Assets ("GRA") unit houses the Infrastructure Investments Group (the "IIF Group"). The IIF Group does not invest money directly on behalf of J.P.Morgan, nor is it a separate entity that owns assets. Rather, it is a collection of individuals who raise capital, form funds and, through the Infrastructure Investments Fund (the "IIF" or the "Fund"), deploys capital on behalf of third party investors.

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[1] And additional related information requested by email by Elise Bean on October 15, 2014.

[2] And additional related information requested by email by Elise Bean on October 15, 2014.

J.P.Morgan does not invest in the Fund, and the Fund's general partners are controlled by third parties unaffiliated with J.P.Morgan.

J.P.Morgan Investment Management, Inc. (one of the vehicles through which GRA operates within J.P.Morgan Asset Management) provides investment advice to the Fund.

With regard to the IIF's investments, since it launched in 2006, the Fund has offered investors a moderate-risk approach to infrastructure investing that is diversified both geographically and by sub-sector. IIF seeks to invest in a broad range of infrastructure and infrastructure-related assets located primarily in the United States, Canada, Western Europe and Australia, and secondarily in other Organisation for Economic Co-operation and Development ("OECD") countries. These assets may include:

- Toll roads, parking garages, bridges and tunnels
- Oil and gas pipelines
- Electricity transmission and distribution assets
- Contracted power generation assets
- Communications assets
- Water distribution and wastewater collection and processing assets
- Railway lines and rapid rail links
- Seaports
- Airports

There is not a separate OECD infrastructure investment group under the GRA unit. Rather, this reflects that most investments made by the IIF are targeted toward OECD countries. In addition, GRA has a separate platform that seeks to invest capital in infrastructure-related investments in Asia.

Question 12: Please provide, for the period 2008 through 2013, a description of the insurance coverage (including exclusions, deductibles, and caps) for (i) JPMorgan's interests in power plants, and (ii) JPMorgan's consolidated physical commodity holdings.

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Question 13: Please let us know if the attached chart regarding power plants contains any errors, and if so, please correct them and return.

Response: Please refer to the enclosed chart, marked as JPM-COMM-PSI-000061 to JPM-COMM-PSI-000063.

Question 16: Please confirm that JPMorgan Chase Bank does not net its commodity derivatives for the purpose of calculating compliance with the OCC's 5 percent regulatory limit.

Response: Confirmed. It is important, though, to provide the context and background to this limit. In June 1993, the OCC issued Interpretive Letter 632 which stated that it is permissible for a national bank to supplement its hedging activity, subject to certain conditions, by making or taking physical delivery of commodities, transfer or receive documents of title, and engage in other related activities. The letter provided that, *inter alia*, physical activities could only be a "nominal" percentage of a bank's hedging activity. In August 1995, the OCC issued Interpretive Letter 684, in which it defined "nominal" as no more than five percent of total transactions involving eligible commodities. The limit is designed to ensure that only a small amount of the national bank's overall activity is in the physical markets.

J.P.Morgan calculates its compliance with the OCC's activity limit daily. This calculation looks at, within the national bank, the total amount of LME metals and off warrant metals versus the total amount of its overall metals activity (derivatives, LME metals, off warrant metals, and futures). The physical component of these activities is limited to five percent, and is calculated in terms of volumes (measured in metric tonnes). Accordingly, and given the activity limit itself and the way in which J.P.Morgan calculates its compliance with the activity limit, commodities derivatives are not netted for purposes of the OCC limit. The numerator is the gross amount of base metals held in inventory plus the gross amount of metal that moves through the bank that day in instantaneous title transfer transactions, and the denominator is the gross notional of all metals activity, both physical and outstanding derivatives and futures referencing base metals.

Finally, while the OCC's quantity of activity limit is not a risk limit, even if these activities were to be included in a risk limit, the incremental market risk is minimal as the physical commodities activities in question are a hedge within a customer-driven derivatives business.

Question 17: Please confirm that JPMorgan Chase Bank calculates its compliance with the OCC 5 percent regulatory limit on a units basis, and not on a dollar amount basis.

Response: As discussed above in response to Question 16, that is correct.

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Please let me know if you have any questions.

Sincerely,

Steven R. Ross
Counsel for JPMorgan Chase & Co

cc: The Honorable John McCain, Ranking Member

Power Plants Owned or Controlled via Tolling Agreements

2008 to present

Previously-Acquired Power Plants/Tolling Agreements That Have Since Been Terminated Or Sold

Power Plant	Location	Market	Capacity in MWs[1]	Owned or Tolled by JPMorgan	Percentage of JPMorgan Ownership	Date JPMorgan Assumed Control	Information re Re-Tolls[2]	Date of Termination or Sale	Other Information
OLS Camarillo	Camarillo, California	CAISO	29	Owned	30%	5/30/2008 (Bear Stearns Acquisition)		10/1/2010	Sold to Cal State University -- Channel Islands
OLS Chino	Chino, California	CAISO	29	Owned	30%	5/30/2008 (Bear Stearns Acquisition)		8/23/2013	Sold to Tateswood Energy
Carson Cogeneration	Carson, California	CAISO	49	Owned	33%	5/30/2008 (Bear Stearns Acquisition)		7/20/2010	Sold to EOG
Huntington Beach 3	Huntington Beach, California	CAISO	225	Tolled	N/A	1/1/2010		9/30/2011	Plant taken offline
Huntington Beach 4	Huntington Beach, California	CAISO	227	Tolled	N/A	1/1/2010		9/30/2011	Plant taken offline
Grays Harbor	Satsop, Washington	BPA/WECC	480 (Summer) 520 (Winter)	Tolled	N/A	12/1/2010 (RBS/Sempra Acquisition)		12/31/2013	
Greeley Cogen	Greeley, Colorado	Colorado	32	Owned	100%	5/30/2008 (Bear Stearns Acquisition)		10/1/2008	Sold to Stark Investments
Thermo Cogen	Ft. Lupton, Colorado	Colorado	272	Owned	100%	5/30/2008 (Bear Stearns Acquisition)		6/22/2008	Sold to Starwood Capital
Brush Cogeneration	Brush, Colorado	Colorado	70	Owned	50%	5/30/2008 (Bear Stearns Acquisition)		9/10/2008	Sold to Fort Chicago
Gregory Power Partners	Gregory, Texas	ERCOT	345	Owned	14%	5/30/2008 (Bear Stearns Acquisition)		6/18/2011	Sold to Rockland Capital
Evangeline (Cleco)	Evangeline, Louisiana	Cleco BAA (Louisiana)	758	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)		12/31/2011	
Ironwood	South Lebanon, Pennsylvania	PJM	664	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)		6/30/2008	
Red Oak	Sayreville, New Jersey	PJM	764	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)		12/31/2008	
Rumford Cogen	Rumford, Maine	NEISO	85	Owned	1%	5/30/2008 (Bear Stearns Acquisition)		12/30/2010	Sold to New Page

Permanent Subcommittee on Investigations

EXHIBIT #67

Previously-Acquired Lease of Power Plant That Has Since Been Terminated

Power Plant	Location	Market	Capacity in MWs[1]	Owned or Tolled by JPMorgan	Percentage of JPMorgan Ownership	Date JPMorgan Assumed Control	Information re Re-Tolls[2]	Date of Termination or Sale	Other Information
Mojave Cogeneration	Boron, California	CAISO	55	Leased	100%	5/30/2008 (Bear Stearns Acquisition)		6/30/2010	Lease not renewed

Previously-Acquired Tolling Agreements for Which JPMorgan Currently Serves as a Credit Intermediary

Power Plant	Location	Market	Capacity in MWs[1]	Owned or Tolled by JPMorgan	Percentage of JPMorgan Ownership	Date JPMorgan Assumed Control	Information re Re-Tolls[2]	Date of Anticipated Termination or Sale	Other Information
Alamitos 1	Long Beach, California	CAISO	184	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for CY 2008 through 2011; 10/1/2013 through end of tolling agreement	12/31/2018	
Alamitos 2	Long Beach, California	CAISO	184	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for CY 2008 through 2011; 10/1/2013 through end of tolling agreement	12/31/2018	
Alamitos 3	Long Beach, California	CAISO	336	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for CY 2008 through 2010; 10/1/2013 through end of tolling agreement	12/31/2018	
Alamitos 4	Long Beach, California	CAISO	336	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for CY 2008 through 2010; 10/1/2013 through end of tolling agreement	12/31/2018	
Alamitos 5	Long Beach, California	CAISO	504	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for entirety of JPMorgan's ownership of the tolling agreement	12/31/2018	
Alamitos 6	Long Beach, California	CAISO	504	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for CY 2008 through 2011; 10/1/2013 through end of tolling agreement	12/31/2018	
Huntington Beach 1	Huntington Beach, California	CAISO	225.8	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for CY 2008 through 2010; 10/1/2013 through end of tolling agreement	12/31/2018	
Huntington Beach 2	Huntington Beach, California	CAISO	225.8	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for entirety of JPM's ownership of the tolling agreement	12/31/2018	
Redondo Beach 5	Redondo Beach, California	CAISO	183.8	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for CY 2008 through 2011; 10/1/2013 through end of tolling agreement	12/31/2018	
Redondo Beach 6	Redondo Beach, California	CAISO	183.8	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for CY 2008 through 2011; 10/1/2013 through end of tolling agreement	12/31/2018	
Redondo Beach 7	Redondo Beach, California	CAISO	504	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for CY 2008 through 2010; 10/1/2013 through end of tolling agreement	12/31/2018	
Redondo Beach 8	Redondo Beach, California	CAISO	504	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)	Re-tolled for CY 2008 through 2011; 10/1/2013 through end of tolling agreement	12/31/2018	

Previously-Acquired Power Plants/Tolling Agreements Under Contract for Sale

Power Plant	Location	Market	Capacity in MWs[1]	Owned or Tolled by JPMorgan	Percentage of JPMorgan Ownership	Date JPMorgan Assumed Control	Information re Re-Tolls[2]	Date of Anticipated Termination or Sale	Other Information
Lindsay Hill (Tennaska)	Billingsley, Alabama	Southern Company	844	Tolled	N/A	5/30/2008 (Bear Stearns Acquisition)		Third quarter of 2014	Toll is being sold to Mercuria
Kinder Jackson	Jackson, Michigan	MISO	545	Tolled through 2/28/2014; Owned 9/30/2010 to present	100%	5/30/2008 (Bear Stearns Acquisition)		1/2/2016	Sale of the plant is expected to close in the first quarter of 2016

Previously-Acquired Power Plants/Tolling Agreements Currently Held by JPMorgan and Operated by Third Parties

Power Plant	Location	Market	Capacity in MWs[1]	Owned or Tolled by JPMorgan	Percentage of JPMorgan Ownership	Date JPMorgan Assumed Control	Information re Re-Tolls[2]	Date of Anticipated Termination or Sale	Other Information
Panda Brandywine	Brandywine, Maryland	PJM	230	Tolled through 5/31/2014; Owned on 6/1/2014	100%	12/1/2010 (RBS/Sempra Acquisition)			The toll and lease terminate on May 31, 2014, and assets will be returned to JPMorgan subsidiary KMC Thermo LLC
Central Power & Lime	Brooksville, Florida	Florida	139	Owned	100%	5/30/2008 (Bear Stearns Acquisition)			Plant has been converted to a 66MW biomass facility

[1] Operational factors may cause the capacity of the power plant to vary from time to time.
[2] Where JPMorgan has "re-tolled" a power plant, it has sold its contractual rights to a third party.

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TIMOTHY F. GEITHNER
PRESIDENT AND CEO

March 16, 2008

Mr. James Dimon
Chairman and Chief Executive Officer
JP Morgan Chase
270 Park Avenue
New York, NY 10017

Dear Mr. Dimon:

This will record the agreement between JP Morgan Chase & Co. ("JPMorgan") and the Federal Reserve Bank of New York ("FRBNY") dated March 16, 2008. JPMorgan and FRBNY agree to the following material terms in connection with a proposed acquisition by JPMorgan of The Bear Stearns Companies Inc. ("Bear Stearns"):

1. JP Morgan Chase Bank ("JPMCB") currently has access to the Discount Window for eligible assets (as listed on FRBNY website as of 3/16/08). JPMCB shall continue to have access to this facility.

2. FRBNY will provide as an additional non-recourse Advance to JPMCB, in an amount of $30 billion, at the primary credit rate in effect at the FRBNY. Any hedges associated with eligible collateral run with the pool of assets pledged and are in addition to the $30 billion limit. The Advance will be paid down at the maturity of the Advance, and as eligible collateral is sold or matures.

    a. Eligible collateral will be listed on Schedule A attached hereto.

    b. The agreed price of the collateral will be the value of the collateral on the books of Bear Stearns as of the date hereof, irrespective of any markdowns in price subsequent thereto and irrespective of when the collateral is actually pledged to secure the Advance. No margin will be payable in respect of any Advance.

    c. When the collateral is sold to satisfy the Advance, any excess, after the Advance is fully paid, shall be paid by JPMCB to the FRBNY.

3. The Board of Governors of the Federal Reserve System has agreed to grant an exemption from Federal Reserve Act Sections 23A and Regulation W for any funding transaction or guarantee, between JPMCB and Bear Stearns, and any affiliate of JPMCB that occurs as a result of, or in connection with, the acquisition of Bear Stearns, for a period of 18 months, in an amount equal to an aggregate of no more than fifty percent of the capital of JPMCB, with the guarantee of JPMorgan, and fully collateralized, this amount to be revisited thereafter.

4. Risk-weighted assets in the amount of $150 billion acquired directly from Bear Stearns or through a novation of a Bear Stearns transaction (or included in risk-weighted assets of JPMorgan by virtue of its guaranty of the obligations of Bear Stearns) shall be excluded by the FRBNY in calculating the Risk Based Capital Ratio for JPMorgan under Regulation Y for a period of 18 months. Balance sheet assets in the amount of $400 Billion acquired from Bear Stearns shall be excluded by FRBNY in calculating the Leverage Ratio for JPMorgan under Federal Reserve Regulation Y for a period of 18 months. The amount of such assets excluded from the capital calculation shall be reduced from time to time as JPMorgan disposes of the original assets acquired from Bear Stearns.

5. Any assets or activities acquired from Bear Stearns that JPMorgan is not currently permitted to own or engage in shall be treated as permissible assets or activities for a period of two years. After that period, JPMorgan may apply to FRBNY for a series of three one-year extensions to maintain the ownership of such activities or continuation of such activities.

6. The FRBNY will assist JPMorgan in obtaining other regulatory actions as follows:

   a. from Securities and Exchange Commission ("SEC") and FINRA to permit control of Bears Stearns broker-dealers and investment advisors prior to closing of transaction; and to approve changes in control of broker-dealers and investment advisors;

   b. from OCC to grant relief from the legal lending limit and from risk-based capital and leverage rations for JPMCB;

   c. from foreign regulators for expedited approvals of the transaction.

Very truly yours,

Timothy F. Geithner

cc: Mr. Ben Bernanke

LEGALDOCS-#264339-v1-Agreement_request.DOC

EXCERPT

GLOBAL COMMODITIES DEEP DIVE RISK REVIEW

October 2009

J.P.Morgan

Executive Summary

Key Takeaways and Conclusions

- New and Different Risks
  - **Physical Assets:** In addition to credit and market risks found in other IB businesses, the Commodities business involves different risks associated with the ownership, movement and storage of physical assets
  - **Idiosyncratic Risks:** Many commodities transactions have unique and specific risks and characteristics. Risk management is hands on and labor intensive often requiring trade-by-trade review
  - **Product Variability:** Basis risks and quality differentials add to complexity of managing risk (e.g. 3,000 curves feed into GCG VaR, compared with ~200 in Rates and ~1000 in FX)
- Rapidly Growing Business
  - **Expertise:** JPM still building out expertise across disciplines and support areas
  - **Resources:** Significant demands on risk, ops, finance, etc. Five recent acquisitions/integrations; several other due diligence exercises
  - **Technology:** Demands are high. Platform for pricing, risk management and credit is still in developmental stage. Several system migrations
- Risk Capture and Reporting (Mitigating processes in place; filling gaps as quickly as possible)
  - **Infrastructure:** Above risks don't easily fit within our existing infrastructure. Improved systems required
  - **Methodologies:** Certain risks require additional methodology development

Executive Summary

How commodities risk management differs from other asset classes

Some specific risks and issues which make commodities risk management different from other asset classes

- Physical and operational risks converting to market risks - volumetric risks, unit contingency
- Basis risks - seasonality and weather, contango vs backwardation, physical vs financial, regional
- Extended settlement terms – Receivable terms of more than 50 days for certain products
- Property and casualty
- Gap Risk/Volatility risk – greater than other asset classes (daily power volatility can be 200-300% annualized)
- Capturing physical value (e.g. real options extrinsic) in a derivatives framework
- Liquidity risks
- Contract and legal risk
- Right way risk
- Regulatory -
- Reputational
- Environmental and other liability
- Accounting Mismatches

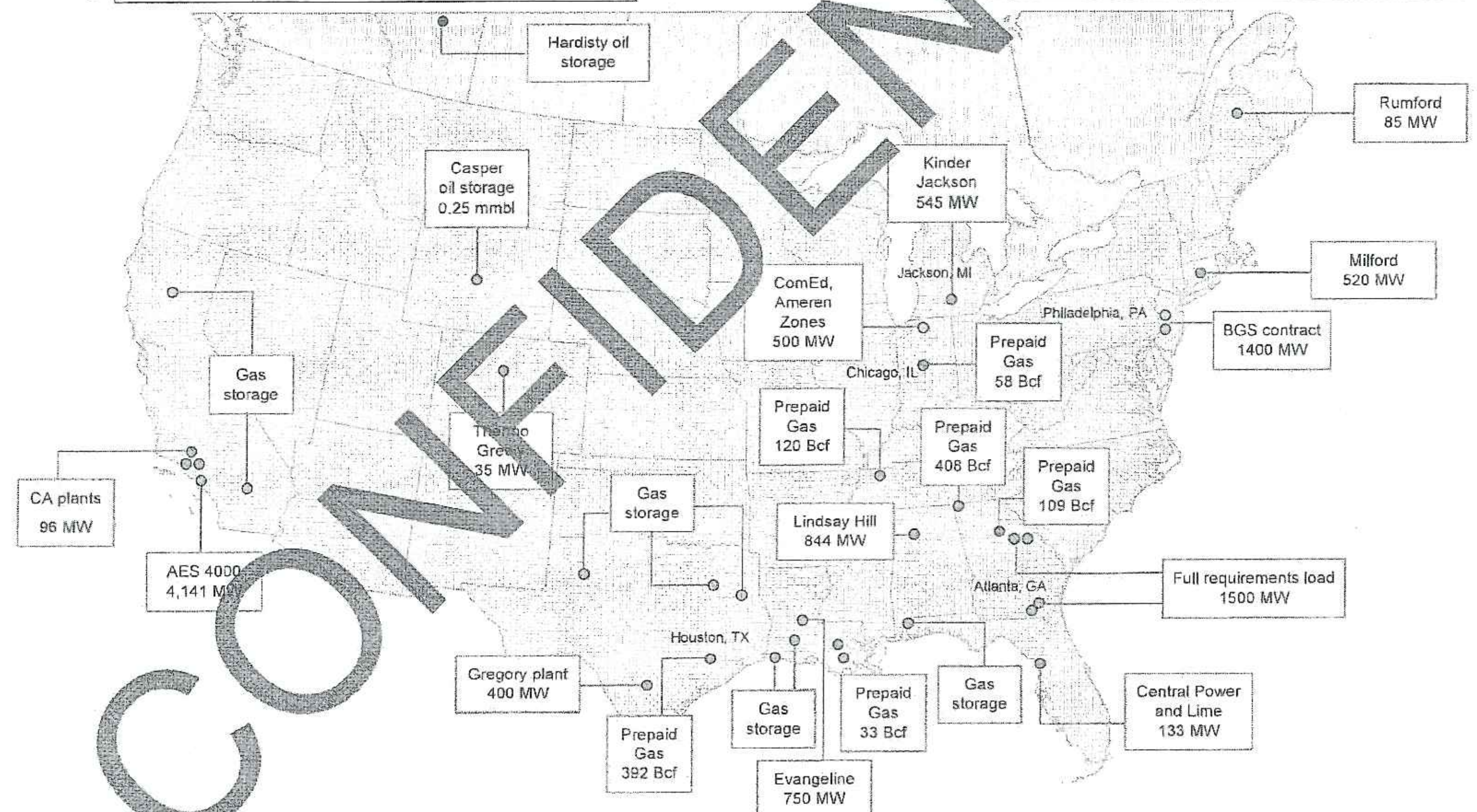
Overview of J.P. Morgan Physical Portfolio[1]

Total Global Capacity

		Stress
Gas storage capacity	30.4 Bcf	$45mm
Prepaid Gas Program	1,120 Bcf	NA
Asset Management	120 MW	NA
Tolling capacity	6,280 MW	$460mm
Power load	3,400 MW	$110mm
Equity Ownership	1,149 MW	$139mm
Floating/tank oil storage	4.6 mmbbls	$14mm
Canadian oil storage capacity	2.0 mmbbls	$15mm

Europe / [illegible]

Denmark	0.5 mmbbl oil tank storage
Malta	1.8 mmbbl oil floating storage
[illegible]	1.0 mmbbl oil floating storage 0.4 Bcf natgas storage
Korea	1.2 mmbbl oil tank storage



[1] Includes assets owned by Arroyo Energy affiliated entities. Power plant interest may vary

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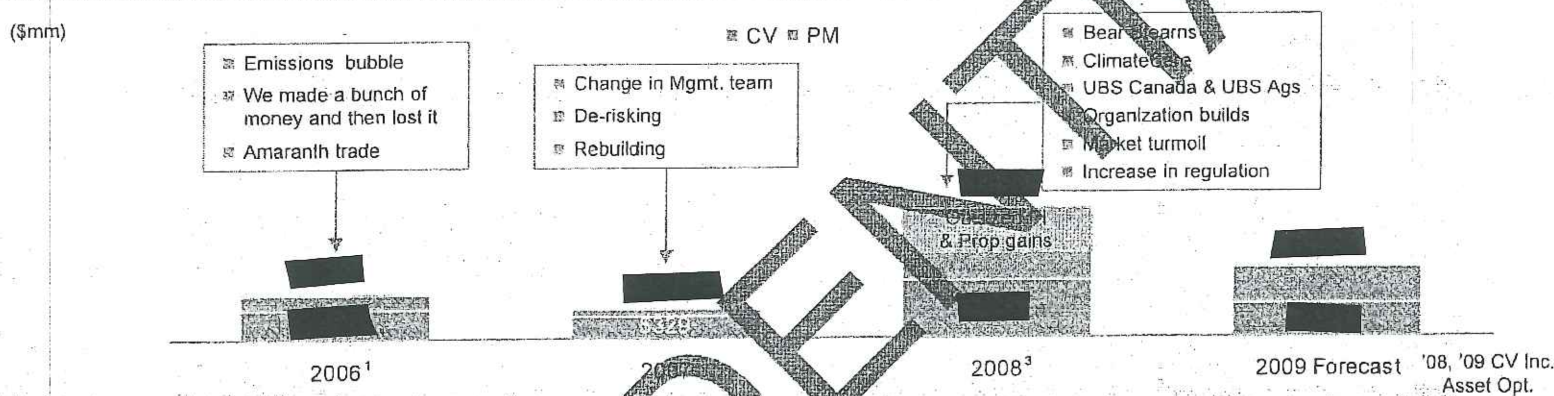
Business Overview: A look back at the evolution of our commodities franchise...

Overview



	2006[1]	2007[2]	2008[3]	2009 Forecast
Head count	164	203	472	498[4]
Sharpe ratio	[redacted]	[redacted]	[redacted]	[redacted]
Return on VAR	N/A	14	67	60

2006

- Unacceptable P&L
- Poor infrastructure, risk management and control
- Unbalanced business model
  - Oil: 9 sales people, no trader
  - Gas: 9 traders, no sales people

2007

- Build Sales & Trading team
- Hire talent
  - Additions: 94
  - Departures: 71
- Rebuild capability
  - Balance Sheet
  - PI practice
  - Control procedures
  - Risk management
- Invest in infrastructure

2008

- Strong financial performance
- Bear Stearns integration
- Expand presence in "physical" markets
- Expand product capabilities (Physical Oil, PI)
- Hire new talent2
  - Additions: 112
  - Departures: 110
- Reintegrating Exotics & Hybrids business

2009

- Delivering on Investments
- Continuing build out of physical oil, Calgary integration, Ags and Softs, build client franchise etc
- Exploit synergies between physical & financial
- Continue to leverage PI
- Drive increased accountability: End–to–end Mgmt.
- Develop a GC culture
- Define technology end state. Accelerate Athena

[1] 2006 Revenue includes [redacted] in Expense Gross-ups from Bullion Shipping
[2] 2007 Revenue includes [redacted] in Expense Gross-ups partly from Bullion Shipping & EMEA Power Interconnect Fees
[3] 2008 Revenue includes [redacted] in Expense Gross-ups mainly from NA Gas Vitol, EMEA Power Interconnect, Bullion Shipping and PI Minority Interest
[4] 2009 YTD, Does not include HC from Mergers, Acquisitions & functional transfers

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FRB-PSI-200638

Risk Summary – Top Risks

Market risk

Principal Investments – Disinvestments risks (stress loss [redacted]

- Exposed to impairment in the value of Arroyo portfolio, Tolls and Load portfolio. The stress loss is estimated by assuming severe unfavorable market moves e.g. power prices dropping by 40%, impairment of capacity, severe economic recession and significant contraction of spark spreads.

Basis risks/Term structures risks - GCG basis risks include physical vs financial, regional, term spread etc. The majority of these risks are captured in VaR, Stress or Rifles

- Nat Gas Summer/Winter spreads – net long 12k lots (stress $45mm, net of $15mm reserve release)
- Volumetric/migration risks – short convexity in Load contracts $43mm reserves
- Long storage vega in Nat Gas – short $3mm Cal13-15 vs back
- Physical vs Financial: $15mm loss if there is physical oversupply at oil storage expiry

Outright Risks

- HR – long power, short gas. Stress loss $42mm (10 std contraction in spreads)

Regulatory risks

- Emissions/SO2 – We are exposed to regulatory changes which would result in our existing credits becoming worthless, and losses realized on contracts sold forward. Rifles loss $20mm
- CFTC – worse case scenario if investor exchange limits are -$197mm including -$41mm for unwind costs and -$137mm for lost investor business

Liquidity risk/Crowded trades

- Long Index, short futures at exchange, long contango front end (e.g. GSCI)- $3bn total ($15mm for 0.5% unwind cost)
- Gold forwards vs short futures – we own 20% Comex futuresOI ($8.6bn). Assuming 0.5% cost to exit loss of $46mm

Frequency of risk turnover

- Physical assets trade like long dated options, where we look to realize extrinsic value over the life of the lease. So hedges tend to be sticky given lower volatility at the back end of the curves. Our main PM risk tends to be traded by our prop book which has a very high risk turnover given dynamic/liquid trading strategy

Credit risk and [illegible]

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Traded Products

Summary of traded products

Base Metals	[illegible]
Aluminium	[redacted]
Copper	
Nickel	
Zinc	
Lead	
Tin	
Steel	
Iron Ore	
Precious Metals	
Gold	
Silver	
Palladium	
Platinum	
Rhodium	
Softs	
Coffee	
Corn	
Lean Hogs	
Cotton	
Live Cattle	
Soybean	
Soybean Meal	
Soybean Oil	
Lumber	
Sugar	
Cocoa	
Wheat	
Orange Juice	
Rapeseed	
Dry Whey	
Feeder Cattle	
Milk	-
Milling Wheat	-
Red Wheat	-
Spring Wheat	-
Palmoil	-
Rough Rice	-
Ethanol	-
Oats	
[illegible]	
Sorghum	

Global Oil	[illegible]
Asian Crude	[redacted]
Brent	
Dated Brent	
Canada	
DUBAI	
Maya	
ME Crude	
TAPIS	
WTI	
Fuel Oil	
Distillates	
Jet	
Gasoline	
Naptha	
NGL	
Emissions	
CO2 [illegible]	
CO2 CER	
CO2 ERU	
CO2 VER	
[illegible]	
SO2	
NOX	
ERC	
Coal	
API1	
API4	
BAF	
[illegible]	
US Coal - East	
US Coal - West	
Freight	
Capesize	
Panamax	
Supramax	
Baltic Dry Index	
Route 4	
Index	
C-IGAR	
DJAIG	
JPMCCI	
S&P GSCI	
S&P GSCI Subindex	

SUMMARY	Weighted Delta MV [illegible]	Weighted Vega ($mm)
Base Metals	[redacted]	-0.5
Precious Metals		2.2
Oil		0.1
Power		0.3
Nat Gas		1.9
Emissions		0.4
Coal		0.1
Freight		0.1
Softs / Agri		0.0
Index		-0.3
Total Commodities	784	4.3

EMEA Power & Gas	[illegible]
German Power	[redacted]
French Power	
UK Power	
Dutch Power	
Spanish Power	
Nordpool Power	
NBP Gas	
TTF Gas	
PEG Gas	
Zeebrugge Gas	
EGT Gas	
Hornsea Gas Storage	
US Natgas	
Nymex outright	
US Power	
Power outright	
Heat Rate	
Peak (mm MWh)	
Offpeak (mm MWh)	
Stress ($mm)	
Natgas Storage	
Summer/ Winter (k lots)	
Stress ($mm)	
Natgas Transport	
Stress ($mm)	
Oil Storage (mmbbl)	
Stress ($mm)	
US Natgas Basis	No. of lots vs
Canada	
Gulf	
Midcon	
Midwest	
Northeast/Appalachia	
Texas	
West	
US Power Regional Spreads	MWhs
AESO	
IESO	
Ercot	
Midcon	
Nepool	
NYISO	
PJM	
South	
West	

Global Commodities Principal Investments Portfolio

Management of PI Risk / limit structure - includes all PI activity as of 1Q09

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Limit approvals

Blythe Masters
Paul Hennessy
Francis Dunleavy
John Anderson
Andrew Sunderman

Limit & Threshold Definitions

- Drawdown: Total YTD realized plus modeled loss vs. Book value.
- Stress: Defined as the severe stress scenario assuming divestment at distressed levels, Arroyo portfolio -$41mm, Generation Assets -$456mm, Georgia Load -$69mm.
- Exposure - Indirect: Notional value of parent guarantees and letters of credit across all tenors.
- Investment Capacity: Additional capital commitments during the current budget year either directly through equity, debt, or other junior capital investment or indirectly through contractual commitments. YTD usage is for the purchase of Cleco Evangeline, LLC bonds as part of our overall strategy to exit that toll.
- Modeled Value Drawdown: YTD peak to trough loss in the modeled value across only the liquid tenors. In the case of a sale, modeled value is replaced by actual sale value.
- Earnings VAR: Computed quarterly to capture mismatch between MTM hedges and underlying positions on accrual accounting.
- Aggregate Book Value: Includes tolls, load, Arroyo, Carbon Investing ($10MM) and $98MM in Cleco bonds

* Trading/Hedging of Commodities Market Risk: Within liquid window, risk management of GCG Principal Investments is governed by the same policies as applies to all GCG trading activity and, specifically, is covered by GCG VaR and Stress Market Risk limits

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Global Commodities Principal Investments Portfolio

[illegible]

Asset	Type	Location & Gas Supply	Size	Term	Ownership	GAAP Book Value	Severely Stressed Value	Parent Guarantees
Okwari UCF	Restructured PPA	Eagle Point, N J	1.666MM MWh	thru 2016	100%	[redacted]	[redacted]	-
Okwari CB I	Restructured PPA	Neward Bay, N J	855,779 MWh	thru 2014	100%	[redacted]	[redacted]	-
Okwari CB II	Restructured PPA	22% Bayonne, N J 78% Camden, N J	1.447MM MWh	thru 2013	100%	[redacted]	[redacted]	-
Misc Projects	Land	Colorado	-		100%	[redacted]	[redacted]	-
Central Power	Power Project Equity	Brooksville, F L	135 MW	Merchant	100%	[redacted]	[redacted]	-
Delta Power		various	various	various	various	[redacted]	[redacted]	
Gregory	Equity - Project w/PPA	Gregory, TX	400 MW	thru 2013	14.50%	[redacted]	[redacted]	-
Rumford	Equity - Project w/PPA	Rumford, ME	85 MW	thru 2020	1%	[redacted]	[redacted]	-
Vineland	Restructured PPA	Vineland, NJ	N/A	thru 2019	5%	[redacted]	[redacted]	-
Camarillo	Equity - Project w/PPA	Camarillo, CA	[illegible]7 MW	thru 2018	30%	[redacted]	[redacted]	-
Chino	Equity - Project w/PPA	Chino, CA	28 MW	thru 2018	30%	[redacted]	[redacted]	-
Mojave	Equity - Project w/PPA	Mojave, CA	55 MW	thru 2010	100%	[redacted]	[redacted]	-
Carson	Equity - Project w/PPA	Carson, CA	42 MW	thru 2020	38.30%	[redacted]	[redacted]	-
				TOTAL ARROYO		$ [redacted]	$ [redacted]	$ -

Note – Assets only and does not include any hedges or related hedge value

Global Commodities Principal Investments Portfolio

GCC PI tolling and load portfolio as of 6/30/09

Asset	Type	Location & Gas Supply	Size	Term	Ownership	GAAP Book Value	Mid-Office Value Current	Mid-Office Value Prior	Mid-Office Value Change	Severely Stressed Value	Parent Guarantees
AES 4000	Tolls + Re-tolls	SP-15 EZ Gen Hub Socal	3,875 MW	5/2018	100%	[redacted]					
Kinder Jackson	Toll	MISO Cinergy Dawn	535 MW	12/2018	100%						
Cleco Evangeline	Toll	Entergy CGT Mainline	750 MW	12/2020	100%						
Tenaska Lindsay Hill	Toll	SOCO Transco	845 MW	4/2027	100%						
Georgia EMCs	Load	GITS	220 MW	12/2015	100%						
					TOTAL TOLLS/LOAD	$					

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Revenue Attribution % by Asset	Capacity	Energy
AES 4000	[redacted]	[redacted]
Kinder Jackson		
Cleco Evangeline		
Tenaska Lindsay Hill		

[redacted] = Redacted by the Permanent Subcommittee on Investigations

Note – Assets only and does not include any hedges or related hedge value

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Commodity Risks and Topics

Summary

Risk	Description	Comments
Volumetric uncertainty	As part of the GCG business we enter into transactions for which the volumetric profile is unknown at the time of transaction. Examples include: Volumetric Production Payments, Emission Reduction projects, and Load Following/Full Requirements Power transactions.	These risks are inherent to the products. Mitigants include: true-up mechanisms (VPP's); caps on the size of the business that we conduct (Emission Reduction project exposure); reserves ($43million of day one reserves on Load risk). Otherwise we rebalance hedges through time or buy proxy hedges (i.e. weather) or options (straddles) to minimize the risk.
Unit Contingent Risk	In certain transactions we bear the risk of non-availability of an operating unit for non-force majeure reasons. To the extent that we've hedged with an LD transaction or are otherwise relying on performance to realize pnl, we are exposed to the risk of non-performance. An example of this risk occurred in July 09 when we experienced a loss of $2.8mm due to a fire affecting AL6 unit (part of California AES 4000 assets).	For the AES re-toll, we maintain contingent business interruption insurance covering catastrophic events (not simple machinery break-down). Coverage is capped at $180mm with a $20mm per occurrence deductible. For other unit contingent trades we will, in some cases, require minimum availability with penalties/liquidated damages for non-availability to bound the risk. We will also calibrate the hedging strategy, an example is to run a light hedge position for the natgas transport for the summer months with a view to minimize losses in event of hurricane. Otherwise, we manage the volumetric risk as above
Physical settlement	In the trading of physical commodities, market convention requires extended settlement terms. This can range from as short as 2-5 days for refined products to as long as 55 days or more for US natural gas	In some markets and with some contracts this risk is aggregated with mark to market exposure and is collateralized under collateral annexes to trading agreements. When not otherwise collateralized, we seek contract provisions which allow us to call for letter of credit or prepayment if settlement exposures exceed internal limits. System constraints currently challenge our ability to tactically manage this risk for natural gas and power when transactions are not otherwise covered by a collateral annex. Manual workarounds are in place for crude transactions.
Risk of Loss or Damage to owned property	Physical Assets, whether PI Investments in power plants or inventory owned as part of a trading strategy, are subject to the risk of physical loss or damage due to catastrophic events (windstorm, flood, machinery breakdown, etc) or act of terrorism.	We maintain commercial property insurance on the Arroyo Delta Assets capped at $450mm per occurrence and $180mm of all-risk cargo insurance for inventory. This latter policy covers physical oil, coal and natural gas while in transit or stored in approved locations and is supplemental to any insurance maintained by the storage or transport company. Sub-limits apply to both policies.

Commodity Risks and Topics

Summary (cont'd)

Risk	Description	Comments
Liability Risk	Through our ownership of assets, including potentially environmentally hazardous assets, we are exposed to liability to pollution incidents and to bodily injury, death, or third party property damage.	For the trading business, this is primarily mitigated through Charterer's & Cargo-owner's Liability insurance in the amount of $750million which covers legal liability to outside parties for Bodily Injury and/or Property Damage, and other liabilities (including Pollution) incurred as charterer and/or cargo-owner during the course of Ocean Marine transit. For the Arroyo Delta Assets we maintain insurance for Commercial General Liability (including legal liability to injured 3rd parties due to operation of plants) in a maximum amount of $50million per occurrence and in the annual aggregate. We also purchase Pollution Liability insurance in an amount of $3million per occurrence and in the annual aggregate. Otherwise, we perform due diligence on third party operators, seek contractual limitations to exposure, and require double hulled vessels when transporting environmentally sensitive materials
Contract Risk	In our primary role as a middleman to transactions, we are subject to the risk of mismatched contract terms. This tends to be most acute when trading physical products where disruption events tend to be both more frequent (whether due to weather events, operating issues, or changes in market design) and more idiosyncratic. Mismatches in Force Majeure provisions, Market Disruption Events/Disruption Fallback provisions or provisions dealing with Market Redesign each exposes us to risk.	In general, we seek to achieve consistency as much as is possible and not to stray too far from market convention with respect to these provisions
Other Legal Risks	Master Contracts for several physically traded products are often less robust than an ISDA and may require expanded confirmation provisions and/or reliance on general terms and conditions. When collateral is provided, there is generally a greater reliance on letter or credit and/or non-cash collateral	Contract terms, or lack thereof, are considered at the time of approval and incorporated in the approved limit.

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Commodity Risks and Topics

Summary (cont'd)

Risk	Description	Comments
Modeling risk	Risks derived from modeling limitations to fully represent the contractual features, example representation of physical constraints of a tolling agreement, impact of economic activity or weather in load forecast	Model Risk Group reviews all pricing models, recommending improvements and/or reserves to address the limitations.
Regulatory environment	CFTC exchange limit restrictions and loss of exemptions could limit our OTC Investor business	Worst case loss could be around $200mm, including unwinding cost and lost business. Details on slide 24.
	Fed granted JPM enhanced legal powers post Bear acquisition to own certain physical assets incl. Tolls to expire in March 2010.	We intend to apply to renew our application – if rejected we will comply to limits or sell assets.
	The economics of many of the markets in which we transact could be significantly impacted by changing regulations. Examples include: CO2 Emissions regime post Kyoto, lifting AZ restriction on power transmission to California affecting capacity curves[1], and the power capacity markets more generally	We impose tenor limits which restrict the amount of CO2 emissions credits exposure beyond Kyoto. We require legal review of contractual provisions prohibiting counterparties to walk-away from SO2 obligations. Otherwise, we continue to monitor capacity fundamentals in California and elsewhere
	As a registered power marketer, JPM is technically a licensed utility. As such, all power contracts are subject to FERC regulation and the Federal Power Act. Market based rate setting authority provides some protection against subsequent challenges to contract prices; however, historical precedent on this point indicates that there is some risk	Legal contracts include the strongest language possible to preserve and protect contract terms
		Bank Holding Company physical exemptions
	PI investments face additional regulatory risks such as FERC/CPUC regulation, carbon legislation, etc.	The range of possible outcomes, while unknown at this time, range from providing an increase in asset to, in the most extreme case, a loss of capacity values that are not offset by market pricing in energy. Our absolute risk is bounded by the NPV of our demand payments, currently $1.8B

[1] In the worst case scenario our losses would be limited to the NPV of our toll demand payments in California region of $342mm (All tolls demand payment is $1.9bn)

Commodity Risks and Topics

Summary (cont'd)

Risk	Description	Comments
Accounting	Difference occurs due to US GAAP accounting vs. economic pnl. Inventory e.g. Nat Gas storage, Oil subject to LOCOM, and Tolling deals subject to accrual accounting. Current Economic P&L $718mm add expenses -$172mm less TRAs $207mm = $683mm Financial P&L	PI - Sensitivity to TRAs can be significant for tolls e.g. for PI $250mm a quarter or $1bn extreme tail event if gas prices doubled from current We have a threshold limit of $250MM for earnings VaR that is part of the overall management of the PI portfolio. Mitigation is difficult absent the application of FAS 133 because the derivatives represent valid economic hedges that are put on to mitigate actual market risk. Metals – Currently $2.2bn base metals stored in warehouse. 20% spot price moving up would mean $400mm accounting adjustment, assuming positions remain unchanged. Current BM LOCOM adjustment is about $9mm but was over $400mm at one point
Reputation Risk	Reputation Risk can arise as a result of the environmental liability risk inherent in asset ownership, through the products we trade (e.g. coal), and through investment in Emission Reduction projects. In the latter case, although JPM does not own nor is responsible for the operation of Emissions reduction projects, there is potential reputation risk related to environmental impact (pollution, bio-diversity, relocation, indigenous population, etc)	New initiatives and large trades which present potential risk are submitted for approval to the Reputation Risk Committee GCG established a risk policy to govern commodities transactions with public entities. The policy determines the levels of pre-trade due diligence depending on the risk of the transaction. At a minimum marketers/traders are required to ensure the transaction is an approved product by the Public Entity (Legal maintains checklist) and the level of risk is aligned to the client sophistication/risk appetite (GCG maintains a list of Commodities Experienced Public Entities). Approval from Risk Committee is required for high risk transactions (eg volumes are large to the natural position of the public entity, unwillingness to pay concerns, atypical/exotics transactions)
Imbedded financing	Many of the transactions undertaken by commodities include some form of imbedded financing. Examples include: VPP's, contract monetizations, flat priced purchases in contango markets and/or flat priced sales in backwardated markets, commodity buy/sell transactions	Such financings are understood at the time of approval and considered in the credit risk appetite

Commodity Risks and Topics

Summary (cont'd)

Risk	Description	Comments
Counterparty willingness to pay	As with other lines of business, JPM is subject to the risk of a counterparty's ability, but lack of willingness to pay settlement payments as and when they come due. This was recently demonstrated by an Asian airline's threats of non-payment. In addition, the history in the US Power Markets has indicated a willingness by some participants to assert that the "just and reasonable" standard under the Power Act has been breached in an effort to alter contract prices	We seek contractual provisions that seek to minimize our exposure to this risk; however, it remains a risk
Storage Risk	Although often a fee for service business with little counterparty credit risk, certain jurisdictions or trade types expose us to the credit risk of the storage company for the full value of the stored material	This risk is vetted by JPM Legal, so understood at the time of approval and considered in the credit risk appetite

Risk Infrastructure Challenges

Risk gaps

- The fast business expansion and on-boarding of new products resulted in several tactical solutions being implemented to support the market and credit risk reporting requirements. Some of the risks are not captured by the current methodologies and/or do not easily fit within our existing risk infra structure.
- The main gaps include:
  - Settlement risk reporting
  - Position risk reporting, including Greeks, by counterparty for all products
  - Off-line credit
  - Exotics VaR and stress proxy
  - Fragmented reporting of interest rate and fx risk
  - Limited reporting of volumetric risk
- Mitigating processes are generally in place to address the above gaps, by means of for example manual adjustment to reports or delta-gamma VaR approximation.
- The strategic solution will require substantial efforts. The systems migration to Endur/Athena and the Commander project is expected to close several gaps in 2010. In parallel it will be necessary to develop new methodologies to appropriately capture and report the risk related to load variability and settlement risk of physical trades.
- Target State Architecture [redacted] budget. Full implementation 2010/2011.
- Support of Business Growth [redacted] 2010 budget (including Coal, Global Oil, Exotics and Ops).

*Numbers are in the planning stage and not final

▬ = Redacted by the Permanent Subcommittee on Investigations

- = Redacted by the Permanent Subcommittee on Investigations

Desk Risk Overview

NA Natgas

- **YTD revenues** [redacted]
- **Key strengths:** ability to offer physical and financial risk management products, extensive storage and transport presence, product expertise all regions from East to West coast and Canada, strong derivatives trading expertise
- **Growth area:** expand existing business, develop LNG capabilities
- **Market risk**
  - VaR: Limit $7.0mm, current $2.6mm, YTD average $5.0mm
  - Drawdown: [redacted]
- **Main Positions as of Sep/23/09**
  - [redacted]
- **Credit risk**
  - Physical gas presents unique challenges in respect of documentation, systems, and monitoring
  - Sensitive CP positions include those with NGX, Noble, Nexterra, AEP Energy Partners, Shell Energy North America, and Encana

NA Power (incl. Asset Mgmt)

- **YTD revenues** [redacted]
- **Key strengths:** Intermediary to clients managing power physical and financial risk, product expertise all regions from East to West coast and Canada, extensive and complex portfolio of physical assets (active management of front end of assets and load)
- **Growth area:** expand existing business, asset ownership (midstream assets, wind), improve Congestion trading capabilities, further develop options desk
- **Market risk**
  - VaR: Limit $8.0mm, current $2.6mm, YTD average $5.0mm
  - Drawdown: [redacted]
- **Main Positions as of Sep/23/09**
  - [redacted]
- **Credit risk**
  - Power poses unique systems, documentation and monitoring challenges
  - A number of illiquid products which challenge our ability to margin acurately
  - Notable CP positions include those with Barclays, British Energy, E.ON, Mirant Midatlantic, and Shell Energy North America

NOTICE

to the

BOARD OF GOVERNORS OF THE

FEDERAL RESERVE SYSTEM

by

JPMORGAN CHASE & CO.

Pursuant to Section 4(k)(1)(B) of the

Bank Holding Company Act of 1956,

as amended, and

12 C.F.R. §225.89

Submitted

December 30, 2009

NOTICE

to the

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

(the "*Board*")

by

JPMORGAN CHASE & CO.

Pursuant to Section 4(k)(1)(B) of the
Bank Holding Company Act of 1956,
as amended (the "*BHCA*"), and
Section 225.89 of the Board's Regulation Y

JPMorgan Chase & Co. ("JPM Chase") respectfully gives notice to the Board, pursuant to Section 4(k)(1)(B) of the BHCA, that it, through its wholly owned non-banking subsidiary J.P. Morgan Ventures Energy Corporation ("JPMVEC") or other non-banking affiliates or subsidiaries, intends to expand the current commodity trading activities it conducts by providing energy management services ("Energy Management Services") to owners of power generation services under energy management agreements ("EMAs"). JPM Chase asserts that JPMVEC's provision of Energy Management Services would be complementary to its business of entering into derivative contracts that are based on non-financial commodities ("Commodity Derivatives Activities") and to its business of providing information, statistical forecasting, and advice with respect to transactions in foreign exchange, swaps, and similar transactions; commodities; and any forward contract, option, future, option on a future, and similar instruments ("Derivatives Advisory Services"), both of which businesses are financial activities, and would not pose a substantial risk to the safety or soundness of depository institutions or the financial system generally.

I. Background

JPM Chase is a financial holding company engaged primarily in banking, investment banking and asset management. As a part of JPM Chase's business, JPMVEC enters into commodity derivatives contracts based on non-financial commodities, and makes and takes physical delivery and/or stores the underlying commodities, as permitted by Section 225.28(b)(8)(ii)(B) of the Board's Regulation Y and as previously approved for JPM Chase under Section 225.89 of the Board's Regulation Y (collectively, the "*Existing Business*").[1]

JPM Chase established a commodity derivatives business in the mid-1980s and established JPMVEC in 1994. In 2005, JPM Chase decided to expand its energy business in response to significant demand from clients for products meeting their risk management needs. JPMVEC currently engages as principal in commodity derivatives transactions and offers a full range of derivatives to its clients across the spectrum of crude oil, coal, electricity and natural gas-related risks. In addition, JPMVEC enters into physical transactions in the natural gas, crude oil, coal, and electricity markets and makes and takes delivery of these commodities.[2] Client response to these products has been significant, and the business has experienced continued

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[1] JPMorgan Chase & Co., 92 Fed. Res. Bull. C57 (2006).

[2] In addition to these activities, JPMVEC and its subsidiaries are parties to EMAs that were acquired, among other activities, from Bear Energy LP and that are permissible for JPMVEC to conduct pursuant to the Letter from Timothy F. Geithner, Federal Reserve Bank of New York, to James Dimon, JPMorgan Chase & Co., dated March 16, 2008.

growth.

JPMVEC now proposes to expand the Existing Business to include providing Energy Management Services under EMAs. Under an EMA, energy traders, schedulers, and related support personnel provide asset optimization services and accounting services to a power plant owner. The energy trader will provide market information and recommend hedging strategies, including capacity and transmission management services and advice regarding switching between fuel inputs. Energy traders and schedulers assist the plant owner with the acquisition and delivery of fuel inputs to the plant. In addition, the energy trader will provide interface services for the power plant owner with independent system operators ("ISOs")/regional transmission organizations ("RTOs") and will schedule plant output to ISOs/RTOs and other power purchasers based on energy prices in the open market. An ISO's/RTO's auction process determines whether a power plant's electric output will be accepted for delivery during those hours and whether the prices that the ISO/RTO will pay for that energy will be the plant's bid price or a price higher or lower than the bid price. If a power plant's bid is not accepted by the ISIO/RTO, or is accepted at a price that does not adequately compensate the plant for the cost to produce energy, the plant may not run. Accordingly, neither the energy trader nor the power plant owner have complete discretion to determine if a plant will run or not run during any given hour of a day.

An energy trader may also provide credit intermediation services to the power plant owner with respect to the owner's counterparties. For example, in connection with such credit services, the energy trader might post collateral to an ISO or

RTO on behalf of a plant owner as part of a credit arrangement to ensure delivery, since dealing directly with the ISO or RTO would be too costly for the plant owner. The energy trader, in turn, will collect money from the ISO or RTO and those funds will be available to the energy trader as a part of the plant owner's collateral arrangement with the energy trader.

Thus, the energy trader either acts as agent, on a disclosed basis, of the power plant owner, or acts as principal to the market for the benefit of the power plant owner. Without the ability to enter into EMAs and provide Energy Management Services, JPMVEC is at a significant disadvantage to its competitors in significant parts of the energy market, and owner/operators are deprived of meaningful hedging and financing opportunities.

II. Discussion

The Board has previously approved Energy Management Services as activities that are complementary to financial activities.[3] JPMVEC will provide Energy Management Services in the same manner as described in the RBS Order and the Fortis Order.

[3] The Royal Bank of Scotland Group plc, 94 Federal Reserve Bulletin C60 (2008) (the "RBS Order"); Fortis S.A./N.V., 94 Federal Reserve Bulletin C20 (2008) (the "Fortis Order").

III. Commitments

In connection with its provision of Energy Management Services, JPMVEC makes the following commitments:

A. Revenues attributable to JPMVEC's Energy Management Services will not exceed 5 percent of JPM Chase's total consolidated operating revenues.

B. JPMVEC will only act as energy manager in the United States if the energy management agreement under which it performs its Energy Management Services provides that:

1. The owner of the facility retains the right to market and sell power directly to third parties, which may be subject to the energy manager's right of first refusal;

2. The owner of the facility retains the right to determine the level at which the facility will operate (i.e., to dictate the power output of the facility at any given time);

3. Neither the energy manager nor its affiliates guarantee the financial performance of the facility; and

4. Neither the energy manager nor its affiliates bear any risk of loss if the facility is not profitable.

IV. Conclusion

For the reasons set forth above, we believe that the manner in which JPMVEC will provide Energy Management Services, as described, is fully consistent with a complementary activity and will not pose a risk to the safety and soundness of depository institutions or the financial system in general. Therefore, we respectfully request that the Board exercise its discretionary authority to authorize JPM Chase, through JPMVEC, to provide Energy Management Services as a complementary activity to its Commodity Derivatives Activities and its Derivatives Advisory Services, subject to the commitments contained herein.

NOTICE

to the

BOARD OF GOVERNORS OF THE

FEDERAL RESERVE SYSTEM

by

JPMORGAN CHASE & CO.

Pursuant to Section 4(k)(1)(B) of the

Bank Holding Company Act of 1956,

as amended, and

12 C.F.R. §225.89

Submitted

December 30, 2009

NOTICE

to the

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

(the "*Board*")

by

JPMORGAN CHASE & CO.

Pursuant to Section 4(k)(1)(B) of the
Bank Holding Company Act of 1956,
as amended (the "*BHCA*"), and
Section 225.89 of the Board's Regulation Y

JPMorgan Chase & Co. ("JPM Chase") respectfully gives notice to the Board, pursuant to Section 4(k)(1)(B) of the BHCA, that it, through its wholly owned non-banking subsidiary J.P. Morgan Ventures Energy Corporation ("JPMVEC") or other non-banking affiliates or subsidiaries, intends to expand the current commodity trading activities it conducts by entering into "energy tolling agreements". In order to expand JPMVEC's activities in this manner, JPM Chase asks the Board to grant it approval under Section 225.89 of the Board's Regulation Y to enter into tolling agreements, which, as further described in Section II.A. below, may involve, among other things, purchasing fuel used to produce electricity, entering into agreements for the transportation of fuel, entering into options to purchase electricity, taking title to electricity and entering into agreements for the transmission and sale of electricity (the "*Complementary Activities*"). JPM Chase asserts that JPMVEC's exercise of the Complementary Activities would be complementary to a financial activity and would not pose a substantial risk to the safety or soundness of depository institutions or the financial system generally.

I. Background

JPM Chase is a financial holding company engaged primarily in banking, investment banking and asset management. As a part of JPM Chase's business, JPMVEC enters into commodity derivatives contracts based on non-financial commodities, and makes and takes physical delivery and/or stores the underlying commodities, as permitted by Section 225.28(b)(8)(ii)(B) of the Board's Regulation Y and as previously approved for JPM Chase under Section 225.89 of the Board's Regulation Y (collectively, the "*Existing Business*").[1]

JPM Chase established a commodity derivatives business in the mid-1980s and established JPMVEC in 1994. In 2005, JPM Chase decided to expand its energy business in response to significant demand from clients for products meeting their risk management needs. JPMVEC currently engages as principal in commodity derivatives transactions and offers a full range of derivatives to its clients across the spectrum of crude oil, coal, electricity and natural gas-related risks. In addition, JPMVEC enters into physical transactions in the natural gas, crude oil, coal and electricity markets and makes and takes delivery of these commodities.[2] Client response

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1 JPMorgan Chase & Co., 92 Fed. Res. Bull. C57 (2006)

2 In addition to these activities, JPMVEC and/or its subsidiaries are parties to energy tolling agreements that were acquired, among other activities, from Bear Energy LP (the "Bear Activity") and that are permissible for JPMVEC to conduct pursuant to the Letter from Timothy F. Geithner, Federal Reserve Bank of New York, to James Dimon, JPMorgan Chase & Co., dated March 16, 2008.

to these products has been significant, and the business has experienced continued growth.

JPMVEC now proposes to expand the Existing Business to include entering into energy tolling agreements, as described in more detail below in Section II.A. In general terms, the individual components of tolling agreements involve the purchase and sale of energy commodities that JPMVEC has existing authority to trade and hold under the Board's Regulation Y and complementary authority granted by the Board.

Tolling agreements are an integral part of the energy market and one of several types of agreements the energy market demands in order to, among other things, provide sources of electricity supply to buyers of electricity such as utilities and financial risk management products to owner/operators. Without the ability to enter into tolling agreements, JPMVEC is at a significant disadvantage to its competitors in significant parts of the energy market, and owner/operators are deprived of meaningful hedging and financing opportunities.

II. Discussion

A. Identify and define the proposed complementary activity, specifically describing what the activity would involve and how the activity would be conducted. *(Section 225.89(a)(1))*

JPMVEC proposes to engage in the Complementary Activities as a complement to the Existing Business. The Complementary Activities will expand the Existing Business to include tolling agreements pursuant to which an owner/operator of an electric generating facility, agrees, for a negotiated fee, to give the other party (the buyer) an option to purchase electricity (and in certain cases other products related to electricity) generated by the facility. In connection with the Complementary Activities, JPMVEC proposes to act as buyer in the capacities described below.

Under a tolling agreement, the buyer will (i) purchase and take title to (and in certain cases, store) fuel used to produce electricity, (ii) enter into agreements for the transportation of fuel, (iii) enter into options to purchase electricity, (iv) take title to electricity and (v) enter into agreements for the transmission and sale of electricity.

A tolling agreement is a power purchase agreement pursuant to which the buyer makes a fixed payment (also referred to as a "capacity payment" or "demand payment") to the owner/operator of the facility for the right to exercise an option to purchase electricity generated by the facility at a predetermined ratio of fuel input to electricity output, which predetermined ratio is referred to in the industry as the "heat rate." In essence, a tolling agreement is simply a call option on electricity tailored to the characteristics of a particular facility. Regardless of whether the buyer actually exercises its option to purchase electricity, the buyer still pays the owner/operator a fixed capacity payment.

A typical tolling agreement is structured in one of two ways, so that when the buyer elects to exercise its option to purchase electricity, it can either (1) provide the fuel directly to the facility or (2) compensate the owner/operator of the facility for fuel the owner/operator has acquired based on the predetermined heat rate. By structuring the transaction in either of these ways, the owner/operator still procures the fuel but does not take fuel price risk, as the buyer is reimbursing the owner/operator for the fuel at the spot market price.

In addition, assuming the buyer exercises the call option on electricity, the buyer typically pays the owner/operator a relatively small variable payment to cover some non-fuel variable operating costs incurred in the production of electricity. These charges are known as variable operation and maintenance ("*VOM*") payments and start charges, and are in addition to the capacity payment. The buyer typically takes physical delivery of the electricity produced at the facility's outgoing electricity meter, although sometimes delivery is required to be made at the nearest liquid market hub.[3] If the buyer is providing the fuel, it is responsible for arranging to provide the fuel to the facility's fuel meter and for paying for any fuel transportation charges incurred to deliver the fuel to the facility. Finally, the buyer may also acquire other related electricity products that are available from a facility.[4] The costs for these products, if sold to the buyer, are typically embedded in the capacity payment. However, these products are sometimes sold directly by the owner to a third party.

Energy tolling agreements are varied in form and manner of

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

4 These ancillary products include a collection of secondary products typically sold to transmission system operators to help maintain the reliability and proper functioning of the grid. For example, transmission system operators are required to have some amount of non-operating generation capacity standing by in case an operating generator goes offline. This is called a "reserve" service.

documentation. Historically, tolling agreements were documented on a one-off basis, not under a master agreement, and were subject to extensive individual negotiations. More recently, tolling agreements are being documented under an Edison Electric Institute (EEI) Master Agreement and/or a one–off agreement similar in form to the EEI or an International Swaps and Derivatives Association, Inc. Master Agreement with a Power Annex. For reference, a draft sample form of confirmation for a proposed tolling transaction under an EEI Agreement is attached hereto as Annex A. In addition, a summary of provisions commonly found in a tolling agreement is attached hereto as Annex B.

A summary of the way in which the Complementary Activities generally will be accounted for is provided in Annex C.

B. Identify the financial activity for which the proposed activity would be complementary and provide detailed information sufficient to support a finding that the proposed activity should be considered complementary to the identified financial activity. *(Section 225.89(a)(2))*

1. Description of the Existing Business

JPMVEC is currently active in the global financial derivatives markets for a wide range of commodities. JPMVEC currently engages in trading in commodities derivatives based on physical commodities, including cash-settled or instantaneous transfer transactions permissible under the Board's Regulation Y and delivery or storage of physical commodities permissible as a complementary activity pursuant to Board Order. JPMVEC's current activities include, among other things, forward and options contracts on electricity, agreements relating to transportation and storage and taking title to fuel and electricity.

2. Complementary Nature of the Complementary Activities

The Board has previously determined that energy tolling is an activity that is complementary to financial activities.[5] JPMVEC will conduct the Complementary Activity in the same manner as that approved in the RBS Order.

Market practice and client needs require that JPMVEC have the ability to enter into tolling agreements with respect to the commodities that are the subject of its ongoing derivatives business. Offering this service is fundamental to maintaining JPM Chase's ongoing banking relationships with its energy generating clients and its ability to serve as the one-stop financial services provider that those clients and the financial markets increasingly demand. Furthermore, this service will allow JPMVEC to structure transactions in a way that best serves customers' risk management needs, while assisting them in optimizing their energy assets without altering existing market practice.

The Complementary Activities will further complement the Existing Business by providing JPMVEC with important market information. The ability to be involved in the supply end of the commodities markets through tolling agreements provides access to information regarding the full array of actual producer and end-user activity in those markets. The information gathered through this increased market

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[5] The Royal Bank of Scotland Group plc, 94 Federal Reserve Bulletin C60 (2008) (the "RBS Order").

participation will help improve JPMVEC's understanding of market conditions and trends while supplying vital price and risk management information that JPMVEC can use to improve its financial commodities derivative offerings.

C. Describe the scope and relative size of the proposed activity, as measured by the percentage of the projected financial holding company revenues expected to be derived from and assets associated with conducting the activity. ***(Section 225.89(a)(3))***

JPM Chase estimates that JPMVEC will generate approximately $30 million in revenue from the Complementary Activities in 2010. It estimates that revenues from these activities will rise to approximately $35 million in 2011 and $40 million in 2012 (all these estimates exclude revenue generated from the corresponding Bear Activity). These revenues are expected to constitute approximately 2% of the overall revenues for the Global Commodities Group, and less than 0.05% of the overall revenues of JPM Chase, in each of those years.

D. Discuss the risks that conducting the activity may reasonably be expected to pose to the safety and soundness of the subsidiary depository institutions of the financial holding company and to the financial system generally. ***(Section 225.89(a)(4))***

The major risks associated with tolling agreements are broadly similar to those taken when trading financially-settled commodities contracts and are identical to those taken when trading physically-settled commodities contracts.

1. <u>Overview of Risks</u>

The primary risks associated with the Complementary Activities are (1) the financial and economic risks associated with an option on electricity that may prove uneconomic at such time as JPMVEC, as buyer, elects to exercise its option to purchase electricity (but the maximum financial exposure to this risk is the amount of the capacity payment and if JPMVEC never exercises its option to purchase electricity, the only payment it makes to the owner is the capacity payment) and (2) "unit contingent risk", which is the risk that JPMVEC sells the electricity it anticipates receiving from the owner upon exercise of its option but the owner is excused from delivering the electricity under the contract (e.g., an unplanned outage has occurred at the facility) and thus JPMVEC does not receive the anticipated electricity from the owner. If this occurs, the owner in the toll typically does not pay market damages to JPMVEC, and JPMVEC will need to replace electricity via spot market purchases at a potentially higher price (it could also be lower). If a tolling agreement is structured such that JPMVEC provides the fuel, JPMVEC will also assume the risk that the facility will not be able to produce electricity because JPMVEC cannot deliver fuel to the facility (whether due to unavailability of fuel or transportation curtailments such that fuel cannot be delivered to the facility). As described below, these risks are exactly the types of risks that are already managed in JPMVEC's everyday business by energy commodity traders.

2. **Managing Risks**

Each party to a tolling agreement must make an independent evaluation of the risks and rewards of a given business situation and consider the appropriate contract terms, under those specific circumstances, that it is willing to accept. Again, however, it is important to recognize that JPMVEC is viewing its exposure under any one particular tolling agreement as limited by the amount of the premium it is required to pay under the tolling agreement and by other contractual provisions. For example, "unit contingent" risk can be mitigated in a number of ways: First, tolling agreements may provide for a reduction in the capacity payments to the owner for non-performance. Second, unit-contingent risk may be mitigated by including "make whole" provisions in the contract such that the "make whole" amount the owner/operator must pay is the difference between JPMVEC's purchase price for electricity under the tolling agreement and the price JPMVEC was required to pay for replacement electricity. Third, in certain circumstances, unit outage insurance or other financial products are available to provide a hedge.

That having been said, and as mentioned above, tolling agreements are essentially a combination and integration of several different transactions in which energy traders routinely engage (i.e., fuel sales transactions and electricity purchase transactions with embedded optionality). Furthermore, the risks associated with tolling agreements (i.e., commodity price risks, counterparty credit risks, force majeure risks) are managed in the same manner as are the risks associated with all other similar energy commodity transactions. Accordingly, as described in more detail below, JPMVEC brings to bear on tolling agreements all of the risk management controls and practices that it uses in the conduct of its energy commodity trading businesses generally.

3. JPM Chase's Risk Management Controls

Market Risk. Exposure to adverse movements in the level or volatility of market prices of commodities is measured and controlled primarily through the use of a value-at-risk ("VaR") approach. JPM Chase has established a daily VaR limit for the

Global Commodities Group, the business unit within which JPMVEC operates, which currently is $30 million. This limit is reviewed periodically. JPM Chase manages its market risk across the entire Global Commodities Group and does not set VaR limits for specific business lines within the Group. In fact, the activities in one business line, such as the Complementary Activities, may offset risk incurred in another line and lead to a decrease in the overall VaR of the Group. JPM Chase does establish position limits (delta, gamma and vega limits) for each underlying commodity that is part of its commodities trading business and that will apply to the Complementary Activities.

Credit Risk. JPM Chase's credit process for the Complementary Activities will fall within its process for commodity derivative transactions generally, which process is the same as that for all over-the-counter derivative transactions it executes. Before a transaction can be executed with a counterparty, which in the case of the Complementary Activities will be the owner/operator, a credit line must be established for the counterparty. In almost all cases, the credit officer with responsibility for the counterparty establishes the credit line. When a derivative transaction is proposed with a counterparty, the derivative marketer calculates the derivative risk equivalent (DRE) of the transaction, which is the loan-equivalent credit exposure that the transaction is expected to generate. The DRE counts against the overall credit line to the counterparty. When a derivative transaction is executed with a counterparty, a credit valuation adjustment (CVA) is calculated, and the line of business that executed the transaction then pays the CVA, either upfront or on a pay-as-you-go basis, to JPM Chase's Credit Portfolio Group (CPG) as consideration for CPG providing default protection to the line of business should the counterparty default and owe a termination payment to the line of business. The CVA represents the counterparty credit charge to the line of business arising from the transaction with the counterparty.

Operational Risk. To the extent JPMVEC stores and transports fuel as part of a tolling agreement, JPMVEC will be exposed to the risks associated with transporting and storing physical commodities, e.g. spillage, contamination, despoliation. JPMVEC will insure that it manages in a safe and sound manner the particular risks that arise in owning physical commodities. For natural gas, coal and oil (the main fuel sources for generating units), JPMVEC will use appropriate storage facilities and means of transportation that are owned and operated by unaffiliated entities selected on the basis of experience, reputation, safety record, adequate insurance and creditworthiness. JPMVEC will also use independent inspectors to inspect and determine the quantity, quality and other specifications of the natural gas, coal and oil. For electricity transportation (electricity cannot be stored), JPMVEC will secure transmission services from FERC-regulated transmission providers, under the FERC-filed tariffs then in effect.[6]

Liability Risk. Another risk associated with transporting or storing physical commodities is the risk of a malfunction or an accident resulting in personal injury or property damage. In general, the terms of any contract with the third party operator of the storage or transportation facility would allocate these liability risks

6 Within the Electric Reliability Council of Texas, transmission providers and their related tariffs are regulated by the Public Utility Commission of Texas as opposed to FERC.

associated with physical ownership to the operator since the underlying commodity is in such operator's "care, custody and control." While at times JPMVEC will enter into transactions that involve the actual acceptance by JPMVEC of physical deliveries or storage of fuel for the unit, JPMVEC does not expect to own or operate entities in the United States that are involved in the storage or transportation of physical commodities.

Reputational Risk. JPM Chase has several policies in place to address the reputational risk of the Complementary Activities. JPM Chase has a policy entitled "Heightened Risk Transactions with Investment Bank Clients" that defines what constitutes a Heightened Risk Transaction, which is the term JPM Chase uses for a complex structured finance transaction. This policy focuses on the reputational risk in these types of transactions and explains the importance to JPM Chase of properly reviewing these transactions. Heightened Risk Transactions are escalated for review to the regional Reputation Risk Committee (there are three, in the Americas, Europe and Asia). JPM Chase has a policy describing the roles, responsibilities and procedures of each Reputation Risk Committee (now known as Policy Review Committees). JPM Chase also has a Know Your Customer Policy that further establishes procedures to safeguard JPM Chase's reputation. In addition, the line of business responsible for marketing and executing transactions is subject to the Appropriateness Policy. This policy provides a framework for approving and monitoring all transactions executed by the line of business, including Heightened Risk Transactions, based on customer sophistication and product complexity. .

E. Describe the potential adverse effects, including potential conflicts of

interest, decreased or unfair competition, or other risks, that conducting the activity could raise, and explain the measures the financial holding company proposes to take to address those potential effects. ***(Section 225.89(a)(5))***

The potential adverse effects associated with the Complementary Activities should be minimal and can be mitigated by JPM Chase's existing control and risk management infrastructure.

Competition. JPM Chase intends to build on its existing commodities trading business. JPMVEC's entrance into the buy-side markets for tolling agreements should increase competition in the market because JPMVEC will be able to enter into transactions from which it is currently precluded. JPMVEC will be able to offer a full array of services that other energy traders currently offer, allowing JPMVEC to compete with other energy traders. In addition, JPMVEC will become a more efficient competitor that can offer cost-efficient and individually tailored risk management services that better meet the needs of its clients, while also supplying additional liquidity to the commodities markets.

It should be noted that the Federal Energy Regulatory Commission's ("FERC's") rules with respect to the competitive wholesale energy markets are designed and intended to create conditions under which the wholesale energy markets can function with fairness and transparency. To that end, FERC carefully vets to whom it grants "market-based rate authority" (*"MBR Authority")*.[7] JPMVEC has already been granted

[7] MBR Authority is the authority to sell power at negotiated rates rather than at rates based on cost

MBR Authority upon a finding by FERC that JPMVEC does not exercise "market power" and cannot erect other barriers to entry for competitors. FERC's role in supporting competitive markets is discussed in more detail in Annex D.

Conflicts of Interest. If permitted to engage in the Complementary Activities, JPM Chase would evaluate the commercial, legal and regulatory implications of providing to its customers any combination of financing and other financial services, including tolling agreements, both generally and with respect to any given transaction. JPM Chase has policies and procedures in place to ensure compliance with the anti-tying provisions in Section 106 of the Bank Holding Company Act Amendments of 1970. As in the case of other credit transactions, JPM Chase would apply those procedures to any tolling agreement entered into by JPMVEC with an independent power producer when the affiliated bank, JPMorgan Chase Bank, National Association ("JPMCB"), also maintained lending relationships. If the lending bank, as part of its credit determination, required the borrower to hedge its exposure with an appropriate party, it would do so in compliance with Section 106. If JPMVEC and JPMCB provided both services, they would do so on terms complying with Section 23B of the Federal Reserve Act, as applicable. JPM Chase already considers all of these issues in connection with the various combinations of risk management and financial intermediation services and other financial and advisory services that it and its affiliates already provide to the energy industry.

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of service. See Annex D.

In addition, FERC has broad authority, partially in response to historical abuses in the wholesale electricity markets, to regulate entities involved in the wholesale energy markets. FERC routinely reviews the transactions of all entities with MBR Authority and has the ability to penalize those who engage in unfair and manipulative practices that are detrimental to the proper functioning of the competitive market. Under authority granted by the Energy Policy Act of 2005, FERC has substantially expanded and emphasized its regulatory and enforcement activities in order to ensure the efficiency and integrity of the wholesale electricity markets and their participants. Any fact commonly understood as a "conflict of interest" that results in JPMVEC having "market power" or being on both sides of a transaction where there is a possible impact on wholesale energy rates would factor into FERC's review of JPMVEC's activities and could result in the imposition of civil and possibly criminal penalties, the imposition of other restrictions and conditions on JPMVEC's ability to participate in the power markets, or the revocation of JPMVEC's MBR Authority. As noted above, a discussion of FERC's authority and its jurisdictional responsibilities in, among other things, preventing conflicts of interest that could lead to market abuses is contained in Annex D.

Market Manipulation. Under the terms of tolling agreements, JPMVEC will not operate or control facilities in the United States that extract, transport, store or distribute physical commodities. The owner/operator of the facility has ownership of and clearly exercises control over the generating facility.[8] Moreover, the rights that JPMVEC

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[8] JPMVEC notes that its relationship with the owner/operator and the facility in a tolling transaction

would have under the tolling agreement (i.e., the right to deliver fuel and the right to receive electricity) all are clearly entailed by the permissible commodities contracts entered into with the owner/operator and do not exceed the rights contemplated by permissible commodities trading activities. JPM Chase's limited role in the commodities markets will limit the opportunities, and more importantly the incentives, that JPM Chase might have to engage in any price manipulation, either directly or indirectly. As a financial holding company, JPM Chase must comply, and has a policy of full compliance, with the regulatory and supervisory regimes of several regulators, as discussed below. Such compliance further reduces the likelihood that JPM Chase or JPM Chase's employees would be able to engage in any form of market manipulation.

Regulation. As discussed above and in more detail in Annex D, FERC extensively regulates the wholesale energy markets. In addition to FERC regulation, certain aspects of energy trading are also generally subject to regulation by the Commodity Futures Trading Commission (the "*CFTC*") under the Commodity Exchange Act as the CFTC is charged with preventing fraud, manipulation and abuse in commodities markets generally.

The physical commodities markets are further protected from the adverse effects of unfair competition, conflicts of interest and market manipulation because financial institutions, such as JPM Chase, are subject to extensive regulation. JPM Chase

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falls squarely within presumptions of non-control in the Board's regulations and it possesses none of the indicia of control identified by the Board in prior interpretations.

and its subsidiaries are subject to regulation by the Board, the Office of the Comptroller of the Currency, the Securities and Exchange Commission and the Financial Industry Regulatory Authority in the United States.

F. Describe the potential benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that the proposal reasonably can be expected to produce. ***(Section 225.89(a)(6))***

The Complementary Activities should provide significant benefits to the public by providing a greater variety of risk management tools that are more efficiently structured to meet customer needs, increase competition and liquidity in the commodities markets and reduce JPMVEC's risk exposure associated with its commodities derivatives contracts.

Authorizing JPMVEC to engage in the Complementary Activities would allow JPMVEC to provide a full-range of commodities-related services to its customers more efficiently. Tolling agreements have had, and will continue to have, an important role in enabling generation unit owner/operators to secure financing for the construction of new generating units or the acquisition of existing facilities. As a condition to borrowing, the lenders providing the financing will typically require that projected cash flows from the facility, once it commences operations, are sufficient to make interest payments for a period of time or to ultimately repay the loan. While a lender's comfort with the energy market or the size of the loan and the otherwise available collateral pool will influence a lender's need for assurances as to the potential cash flows available from the facility, it is not uncommon for lenders to require that most, if not all, of the facility's fuel requirements and electricity output be hedged for a period of time to ensure a certain level of cash flow and to make the valuation of the facility less susceptible to daily price fluctuations in the fuel and electricity markets. Conversely, owner/operators, even apart from lender requirements, may have a similar interest in locking in a certain revenue stream in order to guarantee themselves a certain rate of return and level of profitability. The Complementary Activities will allow JPMVEC to add the services described above to the potential hedge products JPMVEC can offer in order to fully participate in the commodities markets, conducting the Existing Business in a more cost-efficient manner and offering more competitive prices to its clients.

As discussed above in Sections II.A. and II.B., as companies look for more sophisticated risk management tools and become more comfortable with participating in the commodities derivatives markets, they are often looking for a single provider that can meet all of their trading needs. It should also be noted that while JPMVEC is interested in providing this combination of services, the marketplace also is seeking out this combination of services, and generators are becoming increasingly sophisticated in their abilities to structure, evaluate and negotiate packages of risk management and financing products from different combinations of providers that are in their economic best interests.

The addition of a new financially sound and well-capitalized counterparty such as JPM Chase will add needed liquidity to the commodities derivatives markets. Tier 1 common equity capital of $101 billion and a Tier 1 capital ration of 10.2% as of September 30, 2009, JPM Chase has the resources to handle large and complex transactions that few other organizations can match.

Finally, by participating in the widest possible variety of commodities markets and transactions, JPMVEC will gain access to price and related market information and acquire more experience in the markets for physical commodities that it can use to better serve its customers and manage its own risk, which will lead to increased revenues and lower costs, all of which will improve JPMVEC's and JPM Chase's profits and enhance their soundness. As a more effective competitor, JPMVEC will be better able to win business from new clients, resulting in more diversified credit exposure for JPMVEC, both in terms of markets and customer base.

G. **Provide any information about the financial and managerial resources of the financial holding company and any other information requested by the Board.** ***(Section 225.89(a)(7))***

JPM Chase's financial information is available on its website, www.jpmorganchase.com.

III. Commitments

A. Include Complementary Activities in the limit on physical commodities ownership of 5 % of consolidated Tier 1 Capital.

The Board has previously determined that the amount to be included in this limit in connection with energy tolling agreements is the present value of all capacity payments to be made under the energy tolling agreements. JPM Chase commits to the Board that it will follow this methodology and include the Complementary Activities in calculating its compliance with the limit of 5% of consolidated Tier 1 capital on the aggregate market value of the physical commodities that it and any of its subsidiaries hold at any one time as a result of physical commodities trading. [9]

IV. Conclusion

For the reasons set forth above, we believe that the manner in which JPMVEC will enter into tolling agreements, as described, is fully consistent with a complementary activity and will not pose a risk to the safety and soundness of depository institutions or the financial system in general. Therefore, we respectfully request that the Board exercise its discretionary authority to authorize JPM Chase, through JPMVEC, to engage in the Complementary Activities as a complementary activity to its physically-settled and financially-settled transactions in commodities derivatives on nonfinancial commodities, subject to the commitments contained herein.

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[9] As the Board stated in the RBS Order, an energy tolling agreement is similar to a call option on the power produced by the plant with a strike price linked to fuel and power prices. An alternate way of calculating the value of a tolling agreement for purposes of limiting the risk to the toller that the plant proves uneconomical to operate, and thus for purposes of the 5% limit, is to determine the mark-to-market ("MtM") of the option, the tolling agreement, and to include the aggregate out-of-the-money MtM values for all tolling agreements, with no netting against in-the-money values, in the 5% limit. Until such time as the Board allows this method of valuing tolling agreements for purposes of the 5% limit, JPM Chase commits to the methodology set forth in the RBS order.

J.P.Morgan

February 5, 2010

Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue, N.W.
Washington, D.C. 20551

Attention: Mr. Scott Alvarez

Dear Mr. Alvarez:

Prior to JPMorgan Chase & Co. ("JPMC") acquiring The Bear Stearns Companies Inc. (the "Bear Stearns Acquisition"), the Bear Stearns energy business engaged in the following activities which are not currently authorized for JPMC as a financial holding company (an "FHC"): energy tolling, energy management and the purchase and financial restructuring of power plants. In its letter dated March 16, 2008 (the "Letter") relating to the Bear Stearns Acquisition, the Board of Governors of the Federal Reserve (the "Board") provided a two year grace period for JPMC with respect to such activities (herein referred to as the "grandfathered activities"). JPMC has relied on the authorization in the Letter to continue to conduct the grandfathered activities; however such authorization will expire on March 16, 2010 unless extended. JPMC is submitting this letter to request from the Board an extension of the grandfathering period for one year with respect to these three activities for the reasons outlined below.

Energy Tolling and Energy Management:

Conducting energy tolling and energy management activities acquired in connection with the Bear Stearns Acquisition as grandfathered activities has provided the following flexibility for JPMC: (i) ability to conduct business in the same manner as the heritage Bear Stearns business thus preserving its value, (ii) ability to conduct such business without impairing the already existing JPMC energy business (see below with respect to JPMC's Commodities Trading Limit as hereinafter defined) and (iii) ability to remain competitive with other market participants (which may include new FHCs) which are not subject to limitations in their energy tolling and energy management activities. On December 30, 2009, JPMC filed notices for prior approval of the Board to conduct

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[1] Specifically, the Letter states that: states that "Any assets or activities acquired from Bear Stearns that JPMorgan is not currently permitted to own or engage in shall be treated as permissible assets or activities for a period of two years. After that period, JPMorgan may apply to the FRBNY for a series of three one-year extensions to maintain the ownership of such activities or continuation of such activities."

energy tolling and energy management activities (the "Notices"). As of the date of this letter, the Board has not acted on the Notices.

Currently the physical commodity trading business of historical FHCs, such as JPMC, is subject to a requirement that physical commodities held by the FHC may not exceed 5% of Tier I capital (the "Commodities Trading Limit"). In approving tolling as a complementary to a financial in nature activity, the Board has included a requirement that the FHC commit to include the present value of capacity payments under its tolling agreements when calculating compliance with the FHC's Commodities Trading Limit. In the event that grandfathering were not granted and JPMC were required to include existing and future tolling arrangements in its Commodities Trading Limit, JPMC may be required to curtail not only its tolling activities but also its other physical trading activities going forward.

Extension of grandfathering for these activities is warranted because, as recognized by the Board, engaging in energy tolling complements commodities derivatives and trading. The Board has indicated that it has in the past subjected the tolling activities of FHCs to the Commodities Trading Limit because tolling contracts expose the toller to the risk that the plant proves to be uneconomical to operate, which can occur when the cost of producing power is greater that the power's market price. However, given the competitive disadvantages that JPMC would suffer from having to manage its entire physical commodity and tolling activity under the Commodities Trading Limit, JPMC respectively submits that the risks involved in tolling can be managed pursuant to robust risk management processes subject to regulatory examination. This would address legitimate safety and soundness concerns but still provide JPMC flexibility to preserve and grow the energy business franchise acquired in the Bear Stearns Acquisition as well as compete with other market participants on an equal footing.

Similar concerns also exist with respect to continuation of JPMC's energy management activity. The Board has previously determined that a FHC may engage in energy management services as a complementary activity. As part of this activity, the Bear Stearns energy business (and currently JPMC) enters into energy management agreements with plant owners pursuant to which JPMC provides transactional and advisory services to power plant owners. The transactional services consist primarily of JPMC acting as a financial adviser to power plants and the transactional services consist primarily of JPMC acting as a financial intermediary substituting JPMC's credit and liquidity for those of the owner to facilitate the owner's purchase of fuel and sale of power. In approving energy management as an activity complementary to a financial in nature activity, the Board, as in the tolling case, has also imposed certain limitations. Specifically, the Board has required that an FHC commit that revenues attributable to energy management services in the United States will not exceed 5% of its total consolidated operating revenues. JPMC respectfully submits that such limitations are not necessary from a safety and soundness perspective since the main components of this activity involve activities similar to those already conducted by JPMC. JPMC currently provides financial advice (similar to the advice given to plant managers in this case) to third parties. In addition, JPMC's credit and risk management policies apply when JPMC engages in transactions as part of the transactional services component of energy management activity. The Board has also required that each energy management agreement under which a FHC performs energy management services must provide that (i) the owner of the facility retains the right to market and sell power directly to third parties, which may be subject to the energy manager's right of first refusal; (ii) the owner of the facility retains the right to define the level at which the facility will operate (i.e. dictate the power output of the facility at any given time); (iii) neither the energy manager nor its affiliate guarantee the financial performance of the facility; and (iv) neither the energy manager nor its affiliates bear any risk of loss if the facility is not profitable. These limitations were not applicable to the Bear Stearns business and JPMC respectfully requests that JPMC not be forced to restructure energy management relationships to conform to these restrictions and be permited to continue to offer energy management services to third parties absent the foregoing restrictions so long as the overall risks involved are subject to robust risk management processes subject to supervisory review. To the extent that the foregoing restrictions were imposed to insure that an FHC would not engage in commercial activities, JPMC respectfully submits that all aspects of the generation and sale of power and other commodities are more appropriately viewed as financial in nature or complementary thereto when conducted by a company engaged in trading commodities. This analysis also applies to the last activity for which JPMC requests grandfathering approval as outlined below.

Financial Restructuring of Power Plants:

Prior to the Bear Stearns Acquisition, the Bear Stearns energy business also engaged in the activity of purchasing equity interests in power plants and subsequently restructuring and renegotiating the power plants' commodity purchase agreements and energy sale agreements with a view to making the plants more efficient. Often, this involved Bear Stearns becoming the party to the restructured contracts.

To date this restructuring activity has not been determined to be a financial activity or complementary thereto. However this activity is similar in many ways to activities currently permissible for FHCs. As a result, the risk management of this activity draws upon existing JPMC expertise. In addition, this activity involves investing for a financial return in way that allows JPMC to gain valuable insight into the power market which can enhance JPMC's overall commodities business.

First, this activity is a natural outgrowth of the energy management activities conducted by the Bear Stearns energy business. The expertise used to provide energy management services to third party managers is the same expertise at play in this activity which also focuses on restructuring the input and output contracts entered into by power plants. Often, existing plant managers of unprofitable (or suboptimal from an economic standpoint) plants prefer to turn over ownership of the plant to a sophisticated market participant which has expertise in fuel procurement and power marketing. In such cases, the Bear Stearns energy business has purchased, and seeks ability to continue to be able to purchase, the plant and use its expertise to restructure the relevant contracts while the plant is operated by an independent plant manager. The business then sells the now potentially profitable plant for a financial return. Prior to market downturn, plants held as part of this portfolio were usually sold within one to two years. This activity is focused on (i) providing a solution for clients who prefer to exit ownership of unprofitable power plants and (ii) obtaining a financial return by renegotiating and/or replacing existing supply and delivery contracts with the view to making the plant more profitable. In addition, this activity complements JPMC's permitted physical trading and customer commodities business by providing JPMC during the period of ownership with a potential purchaser of fuel and provider of power. During the process of restructuring the plant's contracts, JPMC also gains enhanced knowledge of market pricing which enables JPMC to provide best pricing and execution in the marketplace to its customers. JPMC conducts this activity as a component of its overall commodities trading and client business. JPMC's goal is to augment its financial trading and not run the operations of the plant as a commercial venture in a vacuum. As such, JPMC views this activity as complementary to JPMC's core commodities business. However, until approved as such by the Board, JPMC respectfully requests a continuation of grandfathering status.

In the event that JPMC cannot continue to hold and add to this portfolio as a grandfathered activity, JPMC would be required to divest interests held in the portfolio during a time of continuing market strain. In addition, JPMC would not be able to provide its expertise in fuel procurement and power output structuring to a set of potential clients in need of solutions (i.e. plant managers who desire to sell their interests in the plant to an entity capable of restructuring the various plant contracts with a view to making the plant financially viable.) JPMC would then be unable to compete with other commodities trading firms not subject to restrictions on this activity. JPMC's risk management policies and requirements apply to this activity so that they are conducted in a safe and sound manner. As mentioned above, JPMC believes that the restructuring and ownership of power plants for a financial return enhances JPMC's core commodities capabilities. Subjecting this activity to merchant banking restrictions may not be feasible unless broad authority to renegotiate and act as counterparty to contracts with the plant is determined not to constitute day to day management of the plant. Arbitrary restrictions on the interaction of the plant with the commodities business could severely impede the efficiency and competitiveness of the business in restructuring the plant as a profitable entity in a timely manner.

JPMC requests confidential treatment of the JPMC specific business information set forth above as well as of the fact that JPMC has made this request pursuant to the Freedom of Information Act, 5 U.S.C. 552 (b) (4) (the Act) and the regulations promulgated by the Board thereunder. Information contained herein is not publicly available and concerns proprietary JPMC data, i.e. the importance of these activities to JPMC's commodities business. Disclosure could cause substantial injury to the competitive position of JPMC and its affiliates meeting the substantial competitive harm tests set down in judicial interpretations of the Act.

We appreciate your attention to this grandfathering request and are available to answer any questions you have as you consider this request. Concurrent with this proposal, we have provided detailed information to Board staff as to our current commodities businesses which will hope will aid in your assessing this request. Please direct questions relating to this request to Diane Genova at (212) 648-0268, Kathryn McCulloch at (212) 270-5922 or me at (212) 648-0285.

Very truly yours,

cc, Barbara Yelcich
Ivan Hurwitz

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

ADDRESS OFFICIAL CORRESPONDENCE
TO THE BOARD

June 30, 2010

Kathryn V. McCulloch, Esq.
Senior Vice President
and Associate General Counsel
JPMorgan Chase & Co.
270 Park Avenue, 38th Floor
New York, New York 10017

Dear Ms. McCulloch:

This letter concerns the notices filed December 30, 2009, under section 4 of the Bank Holding Company Act ("BHC Act")[1] by JPMorgan Chase & Co., New York, New York ("JPMC"), to (1) enter into physically settled tolling agreements with power plant owners ("Energy Tolling") and (2) provide energy management services to owners of power generation facilities under energy management agreements ("Energy Management Services"). The Board previously has determined pursuant to Regulation Y that Energy Tolling and Energy Management Services complement the financial activity of engaging in Commodity Derivatives Activities and Derivatives Advisory Services (discussed below).[2]

JPMC is a financial holding company for purposes of the BHC Act. JPMC currently engages in commodity derivatives activities that are permissible for bank holding companies under the BHC Act ("Commodity Derivatives Activities")[3] and also provides financial and investment advisory services for derivatives transactions ("Derivatives Advisory Services") that are permissible

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[1] 12 U.S.C. § 1843.

[2] See The Royal Bank of Scotland Group PLC, 94 Federal Reserve Bulletin C60 (2008) ("RBS Order") and Fortis S.A./N.V., 94 Federal Reserve Bulletin C20 (2008).

[3] See 12 U.S.C. § 1843(k)(4)(F).

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Permanent Subcommittee on Investigations
EXHIBIT #72

FRB-PSI-302571

for bank holding companies under the BHC Act. The Board previously authorized JPMC to engage in Physical Commodity Trading as an activity that is complementary to Commodity Derivatives Activities.[4] JPMC conducts Physical Commodity Trading primarily through a nonbank subsidiary, J.P. Morgan Ventures Energy Corporation, New York, New York. JPMC has requested:

1. authority to engage in Energy Tolling, on a limited basis, as an activity that is complementary to Commodity Derivatives Activities;
2. authority to engage in Energy Management Services, on a limited basis, as an activity that is complementary to both Commodity Derivatives Activities and Derivatives Advisory Services; and
3. confirmation that JPMC's proposed long-term electricity supply contracts are consistent with its Physical Commodity Trading authority.

Energy Tolling

JPMC has requested approval to expand its current activities to include Energy Tolling. Under the energy tolling agreements to which JPMC would be a party, JPMC would make periodic fixed payments to the owner of a power generation facility ("capacity payments") in exchange for the right to all or part of the plant's power output. JPMC would also generally supply fuel and make payments to cover the owner's variable costs plus a profit margin. The plant owner, however, would retain control over the day-to-day operations of the plant and physical plant assets at all times.

JPMC has committed to conduct Energy Tolling activities in accordance with the restrictions, definitions, and conditions previously imposed by the Board on the conduct of those activities. In connection with the Board's approval of JPMC's Physical Commodity Trading activities, JPMC committed to the Board that it will limit the aggregate market value of physical commodities that it and any of its subsidiaries hold at any one time to 5 percent

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[4] JPMorgan Chase & Co., 92 Federal Reserve Bulletin C57 (2006).

of JPMC's tier 1 capital. JPMC also has committed that it will include the present value of capacity payments associated with Energy Tolling contracts in that 5 percent limit. As a result, JPMC's potential exposure to commodity price risk will not increase by engaging in Energy Tolling activities.

<u>Energy Management Services</u>

JPMC has also requested approval to provide Energy Management Services pursuant to an energy management agreement with a power plant owner as an activity that is complementary to its Commodity Derivatives Activities and Derivatives Advisory Services. As an energy manager, JPMC proposes to provide transactional and advisory services to power plant owners. The transactional services would consist primarily of acting as a financial intermediary, substituting its credit and liquidity for those of the owner to facilitate the owner's purchase of fuel and sale of power. JPMC's advisory services would include providing market information to assist the owner in developing and refining a risk-management plan for the plant and providing a variety of administrative services to support those transactions.

JPMC has committed to provide Energy Management Services in accordance with the restrictions, definitions, and conditions previously imposed by the Board on the conduct of those activities. JPMC has made all the commitments that were required in connection with the Board's previous approvals of Energy Management Services. Those commitments generally limit the scope of the activities that JPMC may perform as energy manager to ensure that JPMC incurs only those risks that are consistent with the agency nature of Energy Management Services and limit the revenues attributable to JPMC's Energy Management Services to 5 percent of JPMC's total consolidated operating revenues.[5] The authority to act as energy manager should not expand JPMC's ability to engage in physical commodity trading beyond what it is currently allowed to do under its Physical Commodity Trading authority.

JPMC has committed to conduct Energy Tolling and provide Energy Management Services in accordance with the restrictions, definitions,

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[5] "Total operating revenues" is defined as net interest income and all non-interest revenue, including net securities gains but excluding extraordinary items.

and conditions previously relied on by the Board in authorizing those activities. JPMC also has established and maintained policies and systems for monitoring and controlling the risks associated with Energy Tolling and Energy Management Services and is expected to continue to maintain effective risk-management policies and systems for each of those activities. Approval of the request to engage in Energy Tolling and Energy Management Services likely would benefit JPMC's customers by enhancing JPMC's ability to provide efficiently a full range of commodity-related services consistent with existing market practice. Approval also would enable JPMC to improve its understanding of the physical commodity and commodity derivatives markets and its ability to serve as an effective competitor in those markets.

<u>Long-Term Electricity Supply Contracts</u>

As part of its energy trading business, JPMC proposes to enter into long-term electricity supply contracts with large commercial and industrial end-users. JPMC's current Physical Commodity Trading authority permits it to take a position in a commodity and does not limit the duration of, or counterparties to, its contracts. Most commodities that JPMC is permitted to trade under the Physical Commodity Trading authority, however, tend by their nature to be limited to the wholesale market. Electricity, on the other hand, has a greater potential to be sold not only to end-users generally but also to small retail customers who are unlikely to be participants in the market for energy-related derivatives products. JPMC requests confirmation that entering into long-term electricity supply contracts with large commercial and industrial end-users is consistent with its Physical Commodity Trading authority.

To ensure that JPMC's activities remain complementary to the activities permitted under the Physical Commodity Trading authority, and consistent with previous approvals,[6] JPMC has committed that it will enter into long-term electricity supply contracts only with commercial and industrial customers that consume electricity at a rate of at least (1) 800 megawatt-hours per year or (2) the minimum consumption level for commercial and industrial customers under applicable state law, whichever is greater. Requiring that JPMC contract only with customers that consume electricity at these high levels should help ensure that JPMC transacts with financially sophisticated purchasers

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[6] <u>See</u> RBS Order.

(and not with retail purchasers) and, thus, remains essentially a wholesale intermediary.

Based on the record, the Board has determined that (1) the proposed Energy Tolling is complementary to JPMC's Commodity Derivatives Activities and (2) the proposed Energy Management Services are complementary to JPMC's Commodity Derivatives Activities and Derivatives Advisory Services. In approving the proposed Energy Tolling and Energy Management Services, the Board also has determined that the proposed activities do not pose a substantial risk to the safety or soundness of JPMC, its depository institutions, or the financial system generally and can reasonably be expected to produce benefits to the public that outweigh any potential adverse effects. The Board also confirms that JPMC's proposal to enter into long-term electricity supply contracts is consistent with its Physical Commodity Trading authority.

In making these determinations, the Board relied on all the information, representations, and commitments provided by JPMC to the Board in connection with the notices.[7] These commitments and conditions are critical to the determination that Physical Commodity Trading, Energy Tolling, and Energy Management Services would not pose a substantial risk to the safety and soundness of JPMC, other financial institutions, or the financial system generally. These determinations also are subject to all the conditions set forth in Regulation Y, including those in section 225.7,[8] and to the conditions contained in the Board's previous decisions noted above. These commitments and conditions shall be deemed to be conditions imposed in writing in connection with the notices and this approval and, as such, may be enforced in proceedings under applicable law.

These determinations should not be construed as granting relief from any other conditions or commitments to which JPMC may be subject. In addition, these determinations are subject to the Board's authority to require modification or termination of the activities of a bank holding company or any

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[7] See appendix for a complete list of the commitments JPMC has made in connection with these proposals.

[8] 12 CFR 225.7.

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of its subsidiaries as the Board finds necessary to ensure compliance with, or to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder.

As you are aware, legislation is pending that would impose constraints on the ability of banking institutions to engage in proprietary trading and derivatives activities. You have represented that most, if not all, of the activities to be conducted under the Energy Tolling and Energy Management Services authority that JPMC has requested would be permissible under that proposed legislation. To the extent that any activity becomes impermissible, the Board expects that JPMC would conform such activities to the requirements of the law within the required time periods.

Sincerely yours,

Robert deV. Frierson
Deputy Secretary of the Board

cc: Ivan J. Hurwitz, Vice President
Federal Reserve Bank of New York

Appendix

JPMC, together with its subsidiaries, including those attributable to JPMC's acquisition of The Bear Stearns Companies, Inc. (collectively, "JPMC"), commits with respect to the notices ("Notices") it has filed with the Board to engage in Energy Tolling and Energy Management Services that:

Physical Commodity Trading Activities

1. JPMC will include in the 5 percent aggregate market value limit for physical commodities that it holds at any one time as a result of Physical Commodity Trading the market value of any physical commodities it holds as a result of a failure of reasonable efforts to avoid taking delivery in commodities transactions conducted pursuant to section 225.28(b)(8)(ii)(B) of Regulation Y. In addition, JPMC agrees to notify the Federal Reserve Bank of New York if the aggregate market value of commodities held under this approval exceeds 4 percent of JPMC's tier 1 capital.

2. JPMC will take and make physical delivery only of physical commodities for which derivative contracts have been authorized for trading on a U.S. futures exchange by the Commodity Futures Trading Commission or physical commodities of which the Board has specifically authorized JPMC to take and make physical delivery (collectively, "Approved Commodities").

3. JPMC will enter into long-term electricity supply contracts only with large commercial and industrial end-users that consume electricity at a rate of at least (i) [illegible] megawatt-hours/year or (ii) the minimum consumption level for large commercial and industrial customers under applicable state law, whichever is greater.

4. JPMC will conform to the requirements of the BHC Act, including by divestiture if necessary, the activities of (i) owning, investing in, or operating storage facilities for commodities that it is not permitted to hold or store under the BHC Act and (ii) making and taking physical delivery of commodities that are not Approved Commodities, including metal concentrates, acquired in connection with the transactions contemplated

by the Notices within two years of consummation of the transactions, or such longer period as the Federal Reserve in its discretion may grant.

5. After consummation of the transactions contemplated by the Notices, JPMC will not expand its direct or indirect activities or investments in the activities of (i) owning, investing in, or operating storage facilities for commodities that it is not permitted to hold or store under the BHC Act and (ii) making and taking physical delivery of commodities that are not Approved Commodities, including metal concentrates. JPMC will not expand these activities or investments beyond those engaged in by RBS Sempra Commodities LLP immediately prior to the date of the consummation of the proposed transaction by directly or indirectly (1) acquiring direct control of a company engaged in any activity, or acquiring any assets or business lines of another company that engages in impermissible activities, (2) increasing the types of investments, products, or services to be engaged in or provided by JPMC, or (3) any similar transactions that would result in an expansion of these activities.

Energy Tolling

6. JPMC will include the present value of all capacity payments to be made by JPMC in connection with energy tolling agreements in calculating its compliance with the limit of 5 percent of tier 1 capital on the aggregate market value of the physical commodities that it and any of its subsidiaries hold at any one time as a result of Physical Commodity Trading.

Volumetric Production Payment Transactions

7. JPMC will include any commodities that JPMC receives under a volumetric production payment transaction and does not immediately sell to a third party in calculating its compliance with the limit of 5 percent of tier 1 capital on the aggregate market value of the physical commodities that it and any of its subsidiaries hold at any one time as a result of Physical Commodity Trading.

<u>Energy Management Services</u>

8. Revenues attributable to JPMC's Energy Management Services will not exceed 5 percent of its total consolidated operating revenues.[9]

9. JPMC will only act as energy manager if the energy management agreement under which it performs its Energy Management Services provides that:

   a. The owner of the facility retains the right to market and sell power directly to third parties, which may be subject to the energy manager's right of first refusal;

   b. The owner of the facility retains the right to determine the level at which the facility will operate (i.e., to dictate the power output of the facility at any given time);

   c. Neither the energy manager nor its affiliates guarantee the financial performance of the facility; and

   d. Neither the energy manager nor its affiliates bear any risk of loss if the facility is not profitable.

JPMC agrees that the foregoing commitments are deemed to be conditions imposed in writing by the Board in connection with its findings and decision on the notices filed by JPMC to engage in Energy Tolling and Energy Management Services under section 225.89 of Regulation Y and, as such, may be enforced in proceedings under applicable law.

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[9] Total operating revenues are defined as net interest income and all non-interest revenue, including net securities gains but excluding extraordinary items.

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MWW:mww

bcc: Pat Robinson
Michael Waldron
Chris Paridon
David Alexander
Lisa DeFerrari
Michael Sexton
Robert Brooks
Kathy Everhart
BS&R Clearing Unit
Board Records
Legal Records

J.P.Morgan

[redacted]

MEMORANDUM

TO: CPI Investment Committee

FROM: CPI Team

RE: KJ Toll Disposition Plan

DATE: August 13, 2010

TRANSACTION OVERVIEW

Kinder Morgan Power Company ("KMPC"):

We have negotiated an agreement to purchase 100% of the equity interests of KMPC from Kinder Morgan Inc. ("KMI"), for $21.8 million net cash and a contingent funding obligation, which is expected to be $0 but could be as much as $45.6 million. Under the Operating Case, this investment is expected to yield [redacted] pre-tax IRR and generate [redacted] million in net cash flow thru 2042 with a PV10 value of [redacted] million.

AlphaGen and Triton Common Interests:

We have negotiated an agreement to purchase 100% of the equity interests of AlphaGen, which owns the 545 MW gas fired facility in Jackson, MI ("Facility") and 10% of the common equity of Triton from The CIT Group for [redacted] million. Under the Operating Case, this investment is expected to have a pre-tax cash-on-cash yield of [redacted] and generate [redacted] million in net cash flow thru 2042. (after-tax yield of [redacted] and cash flow and tax benefits of [redacted] million). Finally, PI has negotiated an agreement to purchase 90% of the common equity of Triton Power for $1.5 million from IMH Holdings LLC.

Consolidation of KMPC, Alphagen, Triton Common and JPM's tolling obligations:

Acquiring KMPC, Alphagen, Triton Common, the AlphaGen debt and canceling the existing J.P. Morgan toll results in JP Morgan owning the Kinder Jackson Facility (the "Facility") for an all in cost of $143.2 million or $264/kW (see Table 1 below). We believe the replacement value of the Facility is $1,500/kW and the market value is between $350 – 475/kW. [redacted]

Table 1: Consolidation and Sale Economics

	Kinder Jackson Facility Cost	$MM	$/kW	Comments
A	JPM Toll on Facility (through 2018)	$ [redacted]	$ [redacted]	Current Book Value
B	AlphaGen Debt	$ [redacted]	$ [redacted]	JPM has $104MM (All-in @ 118 % par)
C	Alpha Gen (Equity)	$ [redacted]	$ [redacted]	
D	Kinder Morgan Power Company	$ [redacted]	$ [redacted]	
E	Preferred Option Premium	$ [redacted]	$ [redacted]	Current JPM Book Value
F	Triton Power Working Capital	$ [redacted]	$ [redacted]	Per Financials
G	Triton Power (Equity - CIT)	$ [redacted]	$ [redacted]	
G	Triton Power (Equity - IMH)	$ [redacted]	$ [redacted]	
H	Gas Supply Contract Basis	$ [redacted]	$ [redacted]	Embridge contract
I	Common Option Premium	$ [redacted]	$ [redacted]	Current JPM Book Value
	Total Cost For Facility	**$ 143.2**	**$ 264**	

	Kinder Jackson Facility Sale	$MM	$/kW	Comments
J	Facility Sales Proceeds (2010)	$ [redacted]	$ [redacted]	Market value $350 - 475 / kW
	less Facility Cost (using Toll MTM)	$ [redacted]	$ [redacted]	
	Pre Tax P&L	**$** [redacted]	**$** [redacted]	
	IRR (assuming a sale 6 months after close)		147.5%	

Bear Stearns historically engaged in the activity of restructuring the capital structure and financial and commodity contracts of power plants ("Power Plant Restructuring"). JPMC has continued to engage in Power Plant Restructuring as a grandfathered activity. Power Plant Restructuring is an activity which involves the purchase of equity in a particular company that owns a power plant coupled with the exercise by the investor of an active role in restructuring the input and output contracts entered into by the company with a view to making the overall plant performance profitable. This activity then enables the investor to sell its equity interest in the company and obtain a positive and enhanced financial return on its investment because the plant is now potentially more profitable based on the renegotiated or replaced supply and delivery contracts.

As discussed in our recent call, JPMC has ceased engaging in Power Plant Restructuring, i.e. it will no longer actively engage in restructuring and renegotiating the input and output contracts of power plants in which it holds an equity investment as previously was the case. In the case of its investments in the Chino and Gregory power plant companies, JPMC expects to dispose of its equity interests shortly. In the case of its investment in the Central Power & Lime power plant company, JPMC is taking steps to conform its holding of the investment to the requirements of merchant banking investing authority. Please note that due to financing arrangements, third party creditor approval may be required to take some of the steps that are planned below. Also note that in the event that JPMC is unable to consummate the sale of the Chino and Gregory investments prior to the end of May 2011, JPMC will commence similar steps to conform such investments to merchant banking requirements. In addition, all future power plant company investments made by JPMC will conform to merchant banking requirements as contemplated below.

JPMC will conform to the requirements of merchant banking as follows:

1) JPMC employees will step down from being officers of the power plant company. They will constitute some or all of the board of directors of the company (the "Board") as permitted under the merchant banking rules and negotiated with the other owners, if any, of the company.
2) The power plant company will employ an operational plant manager independent of JPMC. The operational manager will be responsible for the day to day operation of the plant, including the running of the plant infrastructure, maintenance of plant equipment, payment of local property taxes and employees. The operational manager will have signing authority up to a specified dollar threshold. Amounts in excess of such thresholds would be reviewed by the asset manager identified in clause 3 below. Currently all Power Plant investments are already compliant with this step in the process.
3) The power plant company will also employ one or more asset managers independent of JPMC. The asset manager will have overall technical expertise, will manage the negotiation, execution and ongoing operation of input and output contracts, will coordinate the accounting and tax books of the company and will have authority to enter into all contracts in connection with the foregoing subject to overall supervision by the Board as permitted under the merchant banking rules. The asset manager may be separate from the accounting manager depending on the project. There

may be a requirement for Board review of contracts binding the company over specified amounts. If the independent asset manager decides in its sole discretion to requests bids on contracts that are permissible for JPMC to engage in pursuant to its complementary powers (e.g. tolling agreements, energy management agreements, power purchase agreements, etc.), JPMC may bid on such contracts in a process and manner that will conform to merchant banking rules. Currently, Central Power & Lime is the only facility that does not have an independent asset manager.

4) JPMC understands it must dispose of the investment within the merchant banking divestiture period which includes the prior grandfathering period.

COMMODITIES OPERATIONAL RISK CAPITAL

May 18, 2011

STRICTLY PRIVATE AND CONFIDENTIAL

J.P.Morgan

Summary

- Operational Risk Capital is established for Global Commodities by combining two components:
  - Capital needed to support operational risks, which is measured using a historical loss data approach.
    - This is the Investment Bank's standard operational risk model which covers all operational risk including actual loss experience from all of GCG's operating activities. Historical loss data includes operating activities from heritage RBS Sempra.
  - An additional capital allocation related to the Extreme event risk given that actual loss experience in the standard model may not adequately represent GCG's operating risk exposure. The additional capital allocation is calculated by determining a boundary case (worst-case loss), postulated to be an oil tanker spill, and then estimating the magnitude of the loss using an exposure based model.
- The result is a $1.2B GCG diversified operational risk capital allocation, on a fully diversified basis across the Investment Bank, the operational risk capital allocation is $201MM
- It should be noted that in most instances, JPM is not the owner or operator of physical assets and as such does not have primary direct liability. However, for purposes of scenario analyses we consider the likelihood that JPM would be brought into litigation/liability matters

GCG Operational Risk Capital ($mm)

Risk Type	Risks Covered	Mitigants	ORC Components	GCG Diversified ORC	IB Diversified Commodities ORC
Execution/errors	Processing/trade booking errors	*Policies and procedures*	$545		
Fraud / Theft	Employee fraud	*Policies and procedures*	$693		
	Losses from unauthorized trading	*Insurance*		$897	$151
Business Practice / Litigation	Reputational issues/lawsuits	*Insurance*	$327		
Employee Disputes	Discrimination	*Policies and procedures*	$32		
		Insurance			
Extreme event risk	Loss of physical commodities	*Dedicated, experienced staff*	$497	$297	$50
(using oil shipments as proxy)	Liability from accidents or spills	*Operating policies & procedures*			
	(oil, power & gas, LNG, coal, metals, ags)	*Insurance*			
			$2,094	$1,194	$201

Operational risk stress loss scenarios

- The modeled boundary case event, ***a tanker spill***, is the highest postulated loss case for all GCG physical commodities activities

Event	JPM Assets / Activity	Loss Scenario	Loss Calculation ($mm) / Comments	
Tanker Spills	250-400 waterborne cargoes annually	■ Tanker with 50,000MT capsizes - 92% of shipments are less than this volume ■ 30% of the product is spilled - 90% of spills are between 0 and 20% ■ JPM doesn't own or operate tankers, however, we assume JPM would be sued	Loss of product (@$100/bbl) Clean-up costs (estimated at $4,800/bbl) Other components of loss (calibrated based on Exxon Valdez) Fines and penalties (50% of clean up costs; not covered by insurance) Compensatory damages (20% of clean up costs; not covered by insurance) Punitive damages (20% of clean up costs; not covered by insurance) Legal fees (10% of clean up costs) Insurance coverage **Net loss**	$12 $576 $288 $115 $115 $58 ($646) **$518**
Power plant explosion	JPM has equity interest in 4 power plants in the U.S.; the largest is CP&L	■ Explosion at the largest plant with 51 employees on site; total loss of plant and future profits ■ 20% of the plant employees die in the explosion ■ While plants are operated by third party, assumption is JPM is sued	Write-off of power plant Loss of future profits Liability (10 deaths @ $5mm each) Insurance coverage Net loss	$85 $40 $50 ($175) $0
Tolls on Power Plants	JPM currently has tolls on 8 power plants; the largest is AES	■ Explosion results in complete loss of all AES facilities, with 70 employees on site and total loss of plant and future profits ■ JPM is not an equity owner in the plant, however we assume JPM would be sued	Write-off of power plant Loss of future profits Insurance coverage **Net loss**	$328 $65 ($200) **$193**
Gas pipeline or storage explosion	80 bcf storage / 1.8 bcf/d transport; largest is NSS storage facility	■ Explosion at NSS storage facility with total loss of equipment, inventory and future profits ■ 3 fatalities, based on 5-year average (as published by the DOT for gas pipeline & storage incidents in 1991-2010) ■ JPM is not owner of storage / pipeline, but assume JPM would be sued	Write-off of storage carrying value Write-off of gas in ground inventory Loss of future profits Liability (3 deaths @ 5mm each) Insurance coverage **Net loss**	$79 $85 $10 $15 ($100) **$89**
Oil Storage accident	25MM bbls (across multiple locations); largest tank capacity is 500,000bbls	■ 10% of the oil is spilled form the largest tank ■ JPM is not owner of storage, but assume JPM would be sued	Loss of product (@$100/bbl) Clean-up costs (estimated at $3,000/bbl) Other components of loss (assuming same factor as waterborne spill) Fines and penalties (50% of clean up costs; not covered by insurance) Compensatory damages (20% of clean up costs; not covered by insurance) Punitive damages (20% of clean up costs; not covered by insurance) Legal fees (10% of clean up costs) Insurance coverage **Net loss**	$5 $150 $75 $30 $30 $15 ($170) **$135**

[redacted] = Redacted by the Permanent Subcommittee on Investigations

Operational risk stress loss scenarios - continued

Event	JPM Assets / Activity	Loss Scenario	Loss Calculation ($mm) / Comments
Precious metals theft	JPM operates 3 vaults in NY, London & Singapore with $[redacted]f current market value of precious metals In addition to vault personnel, the vault is constantly monitored by Group security, including [redacted] in the vault and at all entrances and exits	■ Theft during transportation or an inside theft ■ While clients are required to insure their own gold, we assume JPM is sued in event of theft or the theft is JPM's own metal ■ Brinks Matt is the largest bullion theft reported, where 3 tonnes of gold were stolen; at today's valuation this would be approximately $135mm	Armored trucks can hold 6 tonnes of gold $270 - *(trucks typically hold 3 tonnes of gold or $135MM)* Insurance coverage (Full value covered; insurance cover is $1B) ($270) **Net Loss** 0 <u>Note</u>: An inside theft would require the collusion of numerous vault personnel, global security personnel and third party logistic personnel. We believe given our high security and control standards, the location of the vaults, and the difficulty in liquidating the stolen material, this possibility is highly remote
Base metals theft	Henry Bath has warehouse operations in 19 locations Largest warehouse is in Singapore, which has approximately 226,000 tonnes of base metal valued at [redacted]	■ large scale inside theft involving all of the warehouse personnel	■ It would take approximately 150 working days (and 14,000 truck loads) to steal all the material given the operational capacity of the warehouse ■ Given the regular independent audits (including both JPM and the LME) and the normal client requests to withdraw metal, such a large scale theft could not go undetected for that length of time ■ The full value of the metal is insured so after insurance there would be no net loss other than the deductible.

Tanker ORC Model Summary

- Additional physical operating risk capital is model based, leveraging an approach similar to an Exposure / Probability of Default / Loss Given Default credit model.

Key Model Attributes

- **Oil Shipments ('Exposure')**
  - The number of shipments and the volume of product carried by each (247 shipment)
- **Probability of Spill ('PD')**
  - The likelihood that a shipment will have a spill (0.007%)
- **Loss Given Spill ('LGD')**
  - The cost of a spill is a function of three components: spill size, clean up costs and other costs, such as fines and penalties, compensatory damages, punitive damages and legal fees
- **Correlation**
  - Assume spills occur independent of one another
- Note that historical industry loss data includes accidents related to single hull vessels. JPM only uses double hull vessels for wet freight, which is now the industry standard.
  - The loss experience between single and double hull vessels is significantly different; as a result our model calculations are very conservative

Results

- **Standalone operational risk capital estimates for the Tanker operations as of Mar 2011**
  - Economic (99.97% Confidence interval): $497mm
  - Regulatory (99.9% confidence interval): $297mm

amounts in $mm

Component of Capital	Regulatory	Economic
Clean Up Cost	147	384
Loss of Product	3	8
Other Components of Cost		
Fines and Penalties	74	192
Compensatory Damages	29	77
Punitive Damages	29	77
Legal Fees	15	38
Insurance	*na*	(279)
Total Standalone Capital	**297**	**497**
Marginal Capital Imact to the IB	27	50

- Insurance benefit recouped for economic, but not yet approved for regulatory

Diversification benefit / factor

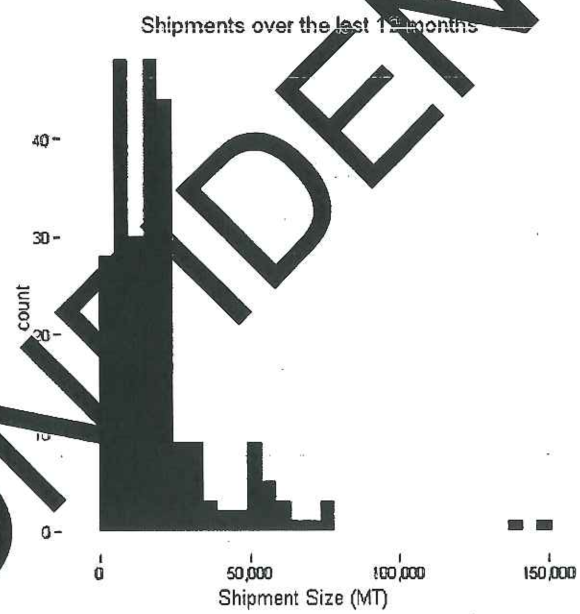
- Due to a zero correlation assumption, there is substantial diversification when combined with the IB (reduction is a factor of 10x)
- For comparison purposes:
  - Total IB ORC is $5.0B

Appendix: Tanker ORC Model

Appendix – Tanker ORC Model: Oil Shipments ('Exposure')

- Exposure is represented by the number of shipments and the volume of product each carries.

- The capital model estimates potential losses over the next 12 months; we use the shipments that occurred over the prior 12 months as a proxy for the shipment that will occur over the next 12 months.



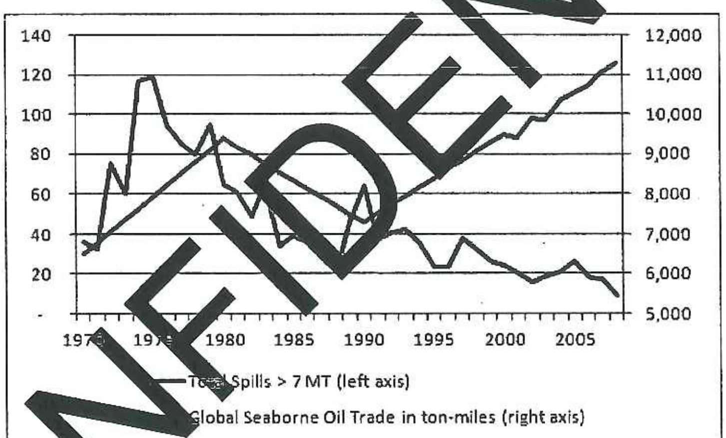
COMMODITIES OPERATIONAL RISK CAPITAL

FRB-PSI-300733

Appendix – Tanker ORC Model: Probability of Spill ('PD')

- What is the likelihood of a spill?

- The number of spills globally continues to decline, while the amount of oil shipped globally continues to increase.
  - Many technological advances contribute to the decline in spills: electronic navigation, GPS, double hull design, etc



- We have estimated the probability of a spill for any given shipment as **0.007%**
- At the current rate of business, we estimate that a spill will occur every 50 years

Appendix – Tanker ORC Model: Loss Given Spill ('LGD')

- Should a spill occur, how much will is cost?

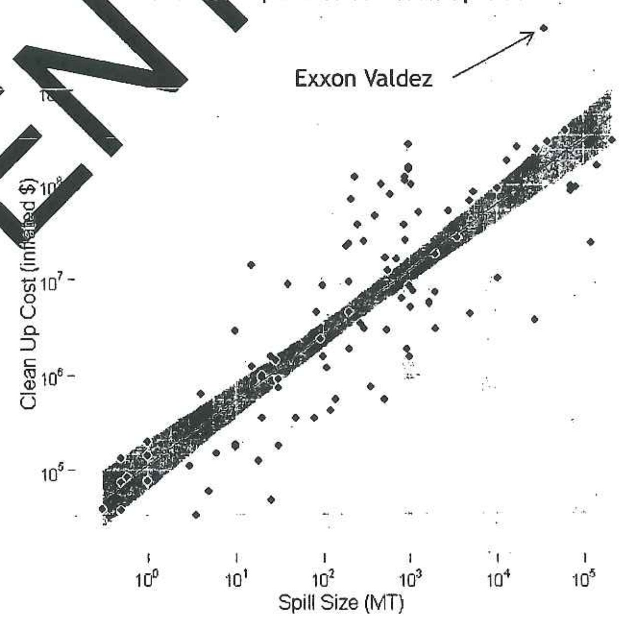
- Loss Given Spill is broken into three components:
  - What percentage of product will be spilled?
  - What will the cost be to clean up the spill?
  - What other costs would occur?

- Expert judgment used to calibrate the spill %
  - Most spills will be between 0% to 20% loss of product, with a small chance of a total tanker loss

- Historical data is used to estimate the regression of clean up cost on spill size. (see chart on right)

- Other components of cost estimated as a % of the clean up costs, calibrated using Exxon Valdez as a case study
  - Loss of Product
  - Fines and Penalties
  - Compensatory Damages
  - Punitive Damages
  - Legal Fees

Historical Spill Size vs Clean Up Cost



Appendix – Tanker ORC Model: Insurance

- Insurance plays a significant role in the commodities business due to the presence of physical products
- We have applied some conservative insurance offsets for economic capital using the current insurance coverage, but we would need regulatory approval to offset regulatory capital with insurance.
- We have modeled the following aspects of insurance:
  - Mapping of coverage
  - Insurer ability to pay
  - Insurer willingness to pay
  - Timeliness of payment
  - Coverage reinstatement

Current Insurance Coverage

Component of Cost	Insured?	Program	Coverage	Deductible

Redacted By

Permanent Subcommittee on Investigations

COMMODITIES OPERATIONAL RISK CAPITAL

From: Francis Dunleavy <Francis.Dunleavy@jpmorgan.com>
Sent: Thursday, April 29, 2010 7:47 PM
To: Rob Cauthen <Rob.Cauthen@jpmorgan.com>
Subject: Re: Resume for Power

Please get him in ASAP.

From: Rob Cauthen
To: Francis Dunleavy
Sent: Thu Apr 29 18:32:40 2010
Subject: Fw: Resume for Power

Fran,

I just got this. We should talk to him. Do you want me to set something up? He might be useful.

Sent from my BlackBerry Wireless Device

From: Chris Robertson
To: Rob Cauthen; Sean O'neal; Thorvin Anderson; Paul Tramonte
Sent: Thu Apr 29 17:26:18 2010
Subject: Resume for Power

This resume just came through in response to our "Specialized Settlements" position in Ops. He is clearly over qualified for that position, but his experience/ background was such that I wanted to forward to you, in case you are interested.

I am not personally familiar with this person. He just posted for the job.

▬ = Redacted by the Permanent Subcommittee on Investigations

John Howard Bartholomew

[redacted]

Experience

Southern California Edison, Power Procurement, June 2008 - Present

Bid Strategy

- Identified a flaw in the market mechanism Bid Cost Recovery that is causing the CAISO to misallocate millions of dollars
- Increased profits by creating a strategy to hedge against the volatility between prompt month and daily gas prices
- Showed how units in reliability areas can increase profits by 400%
- Used Ventyx software to develop day-ahead positions for power and gas traders
- Developed Ventyx model to daily identify errors in the MRTU market optimization

Power Contracts

- 2009 All Source Request For Offers - assisted in negotiation and valuation of tolling, resource adequacy, and heat-rate option contracts

•

Remodeled gas units to utilize a new market initiative that captures all of a unit's characteristics including transition costs

FERC, Office of Enforcement, May - December 2007

Intern

•

Investigated Energy Transfer Partners and the hedge fund Amaranth for market manipulation under the NGA and EPAct 2005. Investigations resulted in show cause orders seeking approximately $450 million in penalties
and
disgorgements

•

Established the basis for taking enforcement action against entities that engage in flipping transactions on natural gas pipelines

U.S. Department of Energy, Policy Office, January - April 2007

Intern

•

Drafted position papers on issues including:

o

Definitions of renewable/replacement/alternative fuels

o

California's challenge of the standard of review used for consumer appliance exemption petitions

o

Comments to the DOE's denial of the Consolidated Residential Furnace Agreement

Education

George Washington University, J.D., May 2008

•

Writing credit - "The California Energy Crisis and Mobile-Sierra"

Lewis & Clark College, B.A. in Economics and Minor in Math, May 2005

•

Economics Merit Scholarship

•

Lacrosse: Captain 2004 and Division Champions 2003

Chris Robertson | Executive Director | North America Commodity Operations | **J.P. Morgan Ventures Energy Corporation**
700 Louisiana St, Suite 1000, Houston, TX 77002 | Telephone: (713) 236-3014 | Facsimile: (973) 463-5472
Email: chris.robertson@jpmorgan.com |Instant Messaging: chris.robertson@mx.jpmorgan.com

From: Luis Davila <Luis.Davila@jpmorgan.com>
Sent: Friday, October 22, 2010 5:55 PM
To: John Rasmussen <John.Rasmussen@jpmorgan.com>; Ryan M Martin <ryan.m.martin@jpmorgan.com>
Subject: Please sir! mor BCR!!!!

Luis Davila | Investment Bank T&O | Energy | ISO Associate | **J.P. Morgan**
700 Louisiana Street, Suite 1000, Houston, TX 77002 | T: 713 236 4169 | F: 713 236 5000
luis.davila@jpmorgan.com | jpmorgan.com

Permanent Subcommittee on Investigations

EXHIBIT #77

From: Dunleavy, Francis <Francis.Dunleavy@jpmorgan.com>
Sent: Monday, March 14, 2011 1:59 PM
To: Masters, Blythe <blythe.masters@jpmorgan.com>
Subject: RE: Privileged and Confidential - CAISO update

I will handle it but it may not be pretty.

-----Original Message-----
From: Masters, Blythe
Sent: Monday, March 14, 2011 12:54 PM
To: Dunleavy, Francis
Subject: Re: Privileged and Confidential - CAISO update

I'm in a meeting in london with Jes.

----- Original Message -----
From: Dunleavy, Francis
To: Masters, Blythe
Sent: Mon Mar 14 13:50:17 2011
Subject: RE: Privileged and Confidential - CAISO update

We should speak

-----Original Message-----
From: Masters, Blythe
Sent: Monday, March 14, 2011 12:49 PM
To: Dunleavy, Francis
Subject: Re: Privileged and Confidential - CAISO update

So in your opinion we are beter off with me trying to decide this without your help??

----- Original Message -----
From: Dunleavy, Francis
To: Masters, Blythe
Sent: Mon Mar 14 12:38:48 2011
Subject: Re: Privileged and Confidential - CAISO update

Redacted

----- Original Message -----
From: Masters, Blythe
To: Dunleavy, Francis
Sent: Mon Mar 14 12:36:10 2011
Subject: Re: Privileged and Confidential - CAISO update

That's ridiculous.

----- Original Message -----
From: Dunleavy, Francis
To: Masters, Blythe
Sent: Mon Mar 14 12:34:30 2011
Subject: Re: Privileged and Confidential - CAISO update

Redacted

Permanent Subcommittee on Investigations
EXHIBIT #79

JPM COMMODITY CAPABILITIES

January 2012

J.P.Morgan

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Agenda

J.P.Morgan

JP Morgan has built a world class client-focused commodities business

Why Commodities at J.P. Morgan?

- Our clients require solutions to manage their commodity price risk

The Franchise

- Over 2,000 clients including corporate, investor, governments
- Deep expertise across all commodity types (600 employees in 20+ locations worldwide)
- Expansive financial and physical platform

Key Elements of our Strategy

- Client focus: Their needs and interests come first
- Innovation: We must be able to respond to a rapidly changing environment
- Risk taking: We are willing to take risks that support our clients' needs
- Balance Sheet & Capital strength: Using our size and scale effectively
- Global footprint: Complete relevance across all key geographies
- Physical & Financial presence: Have ability to meet client needs and manage risk in all markets

Our growth has been consistent and dramatic, with organic investments and acquisitions across products and geographies

Investing in our platform

- J.P. Morgan has made significant investments in building out and diversifying our Global Commodities platform and capabilities - organically and through strategic acquisitions, such as RBS Sempra
- J.P. Morgan's Global Commodities Group offers clients a comprehensive set of market making, structuring, risk management, financing and warehousing capabilities across the full spectrum of commodity asset classes

Key transactions accelerate J.P. Morgan's growth

2005-2006

- J.P. Morgan corporate focus on developing market leading energy trading platform

2006

- J.P. Morgan expands energy trading platform organically
- Acquires the New York Mercantile Exchange's Green Exchange

2008

- Acquired **Bear Energy** as part of J.P. Morgan's acquisition of Bear Stearns
- Acquired **ClimateCare**, a leading originator of carbon offsets

2009

- Acquired **UBS Commodities Canada Ltd** and **UBS AG's global agricultural business**
- Acquired **EcoSecurities** Group plc, a global leader in the carbon credit market

2010

- Acquired **RBS Sempra's** metals, oil, coal, plastics, agricultural, and concentrates; non-U.S. emissions, European power and gas and investor products assets from the Royal Bank of Scotland and Sempra Energy in July
- Acquired **RBS Sempra's** North America natural gas and power trading portfolios in October

J.P. Morgan Commodity Capabilities

Research

- Energy and Power
- Metals, Bulk Commodities
- Grains and Agricultural
- Technical Analysis

Global Commodities

- OTC Energy, Metals, and Ags
- Warehousing Risk
- Structured Products
- Long Dated Contracts

Futures & Options

- Listed Futures and Options
- Specialist Trading Desks
- Global Clearing Solutions
- Electronic Trading

Energy and Power

- Crude Oil
- Refined Products
- NGLs
- Natural Gas
- Electricity
- Coal

Transportation

- Freight

Environmental Markets

- Carbon allowances and offsets (e.g., RGGI; EUAs; CERs; VERs)
- Sulphur Dioxide
- Nitrogen Oxides
- Renewable Energy Credits

Base Metals

- Steel
- Nickel
- Zinc
- Tin
- Copper
- Aluminium
- Lead
- Aluminium Alloy
- NASAAC

Precious Metals

- Gold
- Silver
- Platinum
- Palladium

Agricultural

- Cattle
- Dairy

Grains

- Soybeans
- Wheat
- Corn

Softs

- Coffee
- Sugar
- Cotton

Weather

- Temperature
- Precipitation
- Wind
- Hurricanes
- Sunshine
- Crop Yields

Plastics

- Ethylene
- Polyethylene
- Polypropylene

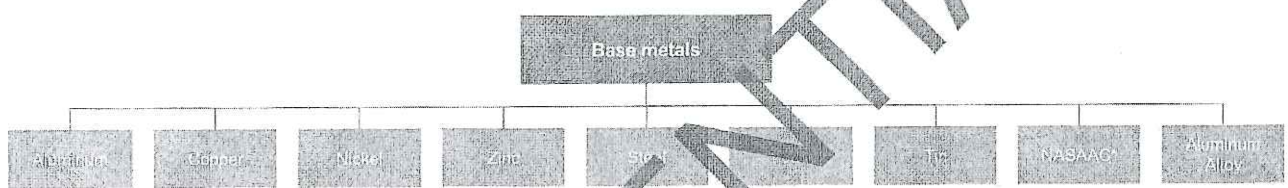
J.P. Morgan's Global Metals Group

Commodity risk expertise is interlinked with firm wide capabilities

- A core component of the Global Commodities Group
- Our primary aim is
  - to facilitate price risk management for clients with exposure to
    - Precious metals – gold, silver
    - PGMs – platinum, palladium, rhodium
    - Base metals – copper, aluminium, zinc, lead, nickel, nasaac, aluminium alloy, tin, cobalt and molybdenum
    - Ferrous metals – iron-ore, steel
  - by providing risk management and ideas that are both appropriate and meaningful
- As a group we have been involved in significant transactions and provided consistent service to our clients over the past 30 years. We have a global reputation as a strong, reliable and committed house to these sometimes turbulent markets
- We remain at the forefront of market trends and product development as we expand the breadth and depth of the metal risk management offering
- Our client franchise is diverse encompassing all sectors of the industry
- Our business is based on cash settled metal OTC derivatives and listed contracts and we also trade in physical metals
- JPMorgan has the largest private bullion vault in London and has recently opened vaults in New York and Singapore
- Henry Bath is a world leading logistics provider specialising in the storage and shipping of exchange based metals around the globe

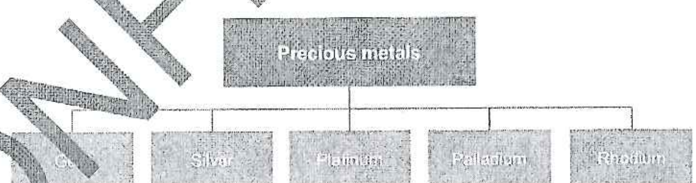
Base and Precious Metals Presence and Services

J.P. Morgan offers a full suite of hedging tools for the Base and Precious metals



- The London Metal Exchange (LME) is the global center for the trading of base metals
  - Hot-Rolled Coil Steel for US Midwest location is traded on the CME + Billet is traded on the LME
  - Copper also trades on COMEX division of NYMEX
- **Products Traded:** Swaps and Options referencing LME, COMEX, CME for financial settlement, transactions in multiple currencies, Asian-style hedges (average of the month)

*North American Special Aluminum Alloy



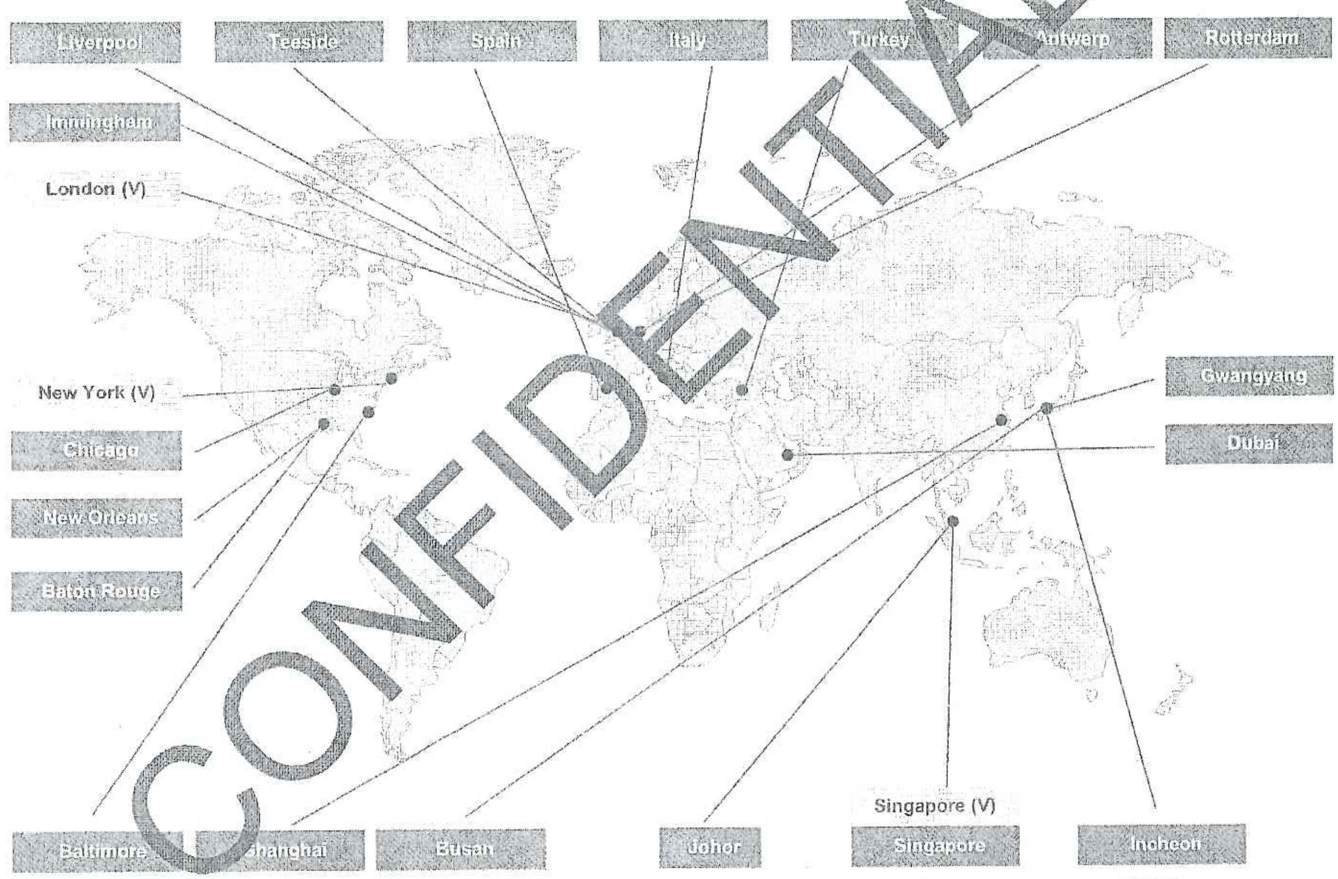
- London is the center for over-the-counter (OTC) trading of most precious metals
- New York (COMEX division of NYMEX) is the largest futures and options market. Good volumes are also traded on the CBOT. Markets are also in Zurich, Tokyo (TOCOM), Sydney, Hong Kong and elsewhere, although not as liquid.
- For platinum and palladium, London and Zurich are the most liquid OTC markets. The majority of metal clears loco Zurich.
- **Products Traded:** Forwards for physical or cash settlement, options, transactions in multiple currencies

J.P. Morgan's Metals Trading Business

J.P. Morgan Base and Precious Metals Trading Business

- **Exchange Memberships:** JPMorgan is a member of all the world's leading metals exchanges including a Ring Dealing Member of **The London Metal Exchange** which is the global centre for the trading of base metals. JPMorgan is also a Market Making Member of **The London Bullion Market Association** and a clearer for major OTC and exchange traded metals contracts
- **Risk taking capability:** We trade metal forwards and options including long dated contracts. JPMorgan's balance sheet and history in the metals market enables participation in larger transactions
- **On-line Trading**: We offer metals products to our clients through our online trading platforms, JPMorgan Metals and MORCOM
- **Physical Trading:** JPMorgan is a leading trader in physical metal specialising in the origination and delivery of metals
- **Market reach:** We trade with major consumers, producers, refiners and processors and investors. The breadth of our franchise provides us access to superior market intelligence, pricing, and liquidity
- **Partnership:** We work closely with our customers in providing optimal service and appropriate idea and strategy generation
- **Confidentiality:** We pride ourselves in confidentiality, trust, and long-term commitment. This is especially relevant when dealing in more illiquid markets and executing large volumes. We have significant experience in out-sized transactions and significant hedging programmes

Physical Metals - 19 Henry Bath Warehouse Locations & 3 JP Morgan Bullion Vaults Worldwide



CONFIDENTIAL

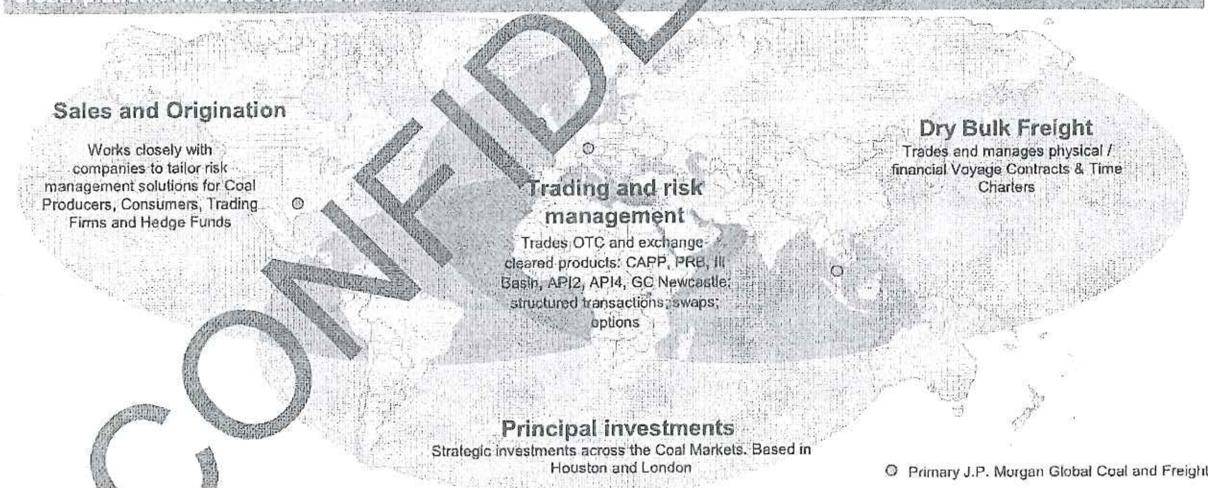
J.P.Morgan

J.P. Morgan's Global Coal and Dry Bulk Freight Platform

Business Overview

- Worldwide Coal – J.P. Morgan is a major participant in the international physical/financial coal and dry bulk freight markets. The J.P. Morgan coal franchise offers physical/financial trading products and risk-management solutions to its extensive customer network.
- Through the acquisitions of Bear Stearns in 2008 (completed April 8, 2008) and the more recent acquisition of the non-US operations of RBS Sempra Commodities (completed July 1, 2010), J.P. Morgan has further enhanced its position as the leading full-service Global Commodities Firm and is now fully capable to service it international coal and freight client base throughout the supply chain.
- J.P. Morgan is now comprised of 10 professionals with a development presence on three continents and extensive expertise and experience in all aspects of the global coal and dry bulk freight markets.

Global platform with end-to-end capabilities



○ Primary J.P. Morgan Global Coal and Freight Office

FRB-PSI-200842

Freight Capabilities

FFA and Options

Quantity/Type
- Can provide specific quantity of cargo or type of vessel

Routes
- Trade spread or individual of all dry bulk routes

Contracts
- Tailor made time charter or voyage contracts

Tenor
- Ability to hedge long-term exposure

Settlements
- Customized settlements to establish stable cash-flow

Structuring
- Exotic and structured products

Physical Market

Charters
- Time charters or voyage charter contracts

Vessels
- Varying vessels – Cape, Panamax, Supra Max and Barge

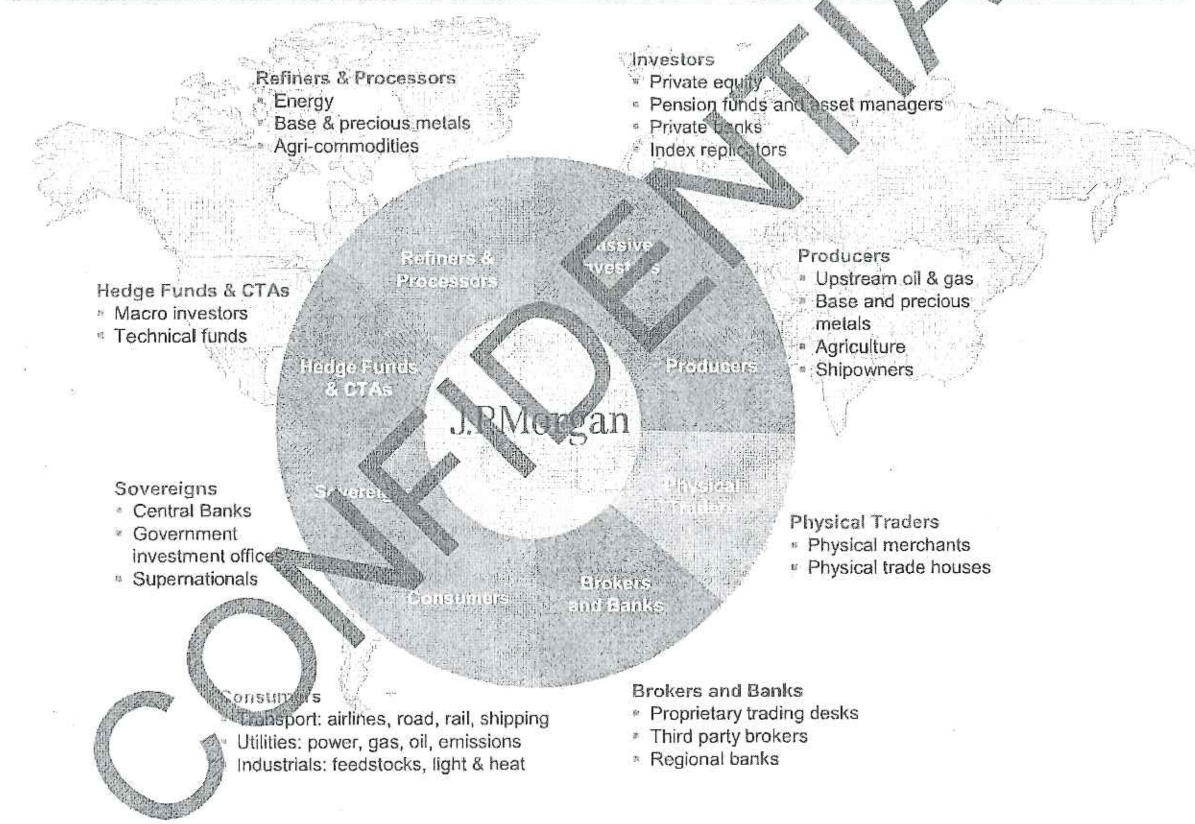
Financing
- Vessel financing and evaluation

J.P. Morgan Chase Counterparty Information

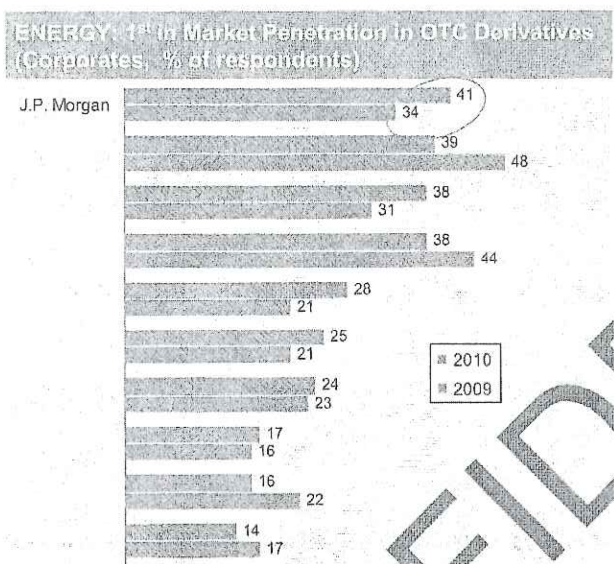
- **J.P. Morgan Trading Entity**
  - J.P. Morgan Securities Ltd
  - Member of the LSE and regulated by the FSA
  - Moody's Credit rating of Aaa
  - Over $6 billion of own assets
- **Trading documentation**
  - Standard ISDA contract referencing "Sub Annex I"

Our client franchise spans the corporate and financial spectrum – from commodities producers and consumers to diversified asset managers

Global commodities market participants



Our focus on building a client franchise was recognized in Greenwich Associates' most recent Energy & Metals Corporate Derivative Surveys

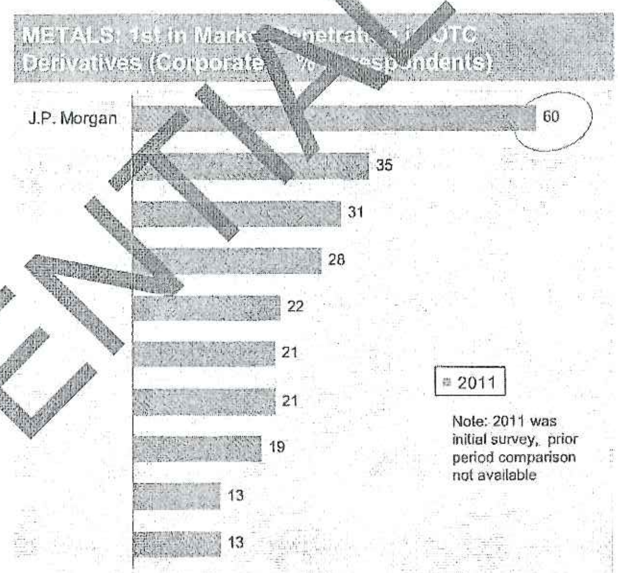


Market Penetration: In addition to our top position in overall; client penetration (at 41%), JPM leads in the number of clients indicating we are a "top 3" dealer (32%) and Lead dealer (16%).

Quality: JPM tied for #1 in Greenwich's "Quality" index, which encompasses sales support, trading capabilities, and back office

Strategic Relationships: Ranked #1 in accounts that would consider JPM for strategic OTC transactions, up from 4th in 2009

Sales Coverage: JPM tied for 1st in votes indicating the GCG salesperson was a "top 3" coverage provider.



Market Penetration: JPM has a dominant position in overall client penetration at 61%; impressively, over half of our clients indicate we are a "top 3" dealer (53%) and 25% indicate we are their Lead dealer, more than double any of our competitors

Quality: We have market-leading client service as well, with a significant #1 rank in the in Greenwich's "Quality" index

Strategic Relationships: Ranked #2 (behind a niche player) in accounts that would consider JPM for strategic OTC transactions

Sales Coverage: JPM rated 1st in votes indicating the GCG salesperson was a "top 3" or "best" coverage provider.

Agenda

J.P. Morgan's Physical Metal Capabilities

J.P. Morgan Metals Vaulting and Warehousing Business

- **Precious Metals:** Established in 1980, JPM has one of the world's leading commercial vaults for precious metal storage at two underground locations in London.
  - Globally the most active Precious Metals clearing business, Loco London gold, silver, platinum and palladium clearing
  - Loco Zurich gold, platinum and palladium clearing
  - Bullion Custody, services performed for wide ranging client base including sovereign clients, central banks, hedge funds and high net worth private bank clients
  - ETF custodian , JP Morgan is the appointed custodian for numerous ETFs including SLV, PALL, PPLT, SGOL
  - Vaults in New York and Singapore opened in September 2010
- **Base Metals:** Henry Bath is a world leading logistics provider specialising in the storage and shipping of exchange based metals around the globe
  - We operate in key port locations across the USA, Europe, Asia and the Middle East
  - We provide our customers with a global platform of exchange approved storage depositories for holding, making and taking delivery of base and ferrous metals, soft commodities (coffee and cocoa) and plastics

Physical Off-take (Precious Metals)

- Index linked or with embedded price protection
- Delivery at mine site is possible (subject to jurisdiction and terms)
- Delivery to a refinery
- Non-good deliverable forms may be possible depending on trade specifics (e.g. grain or dore)
- We would consider term off-take agreements

* Contract specifics such as jurisdiction, quality, term etc will be subject to compliance and credit approval

The Gold Market

Gold is the most liquid out of all the precious metals

- Tenors:
  - 1-4 year - the most liquid time buckets
  - 5-7 years - liquidity is more constrained due to infrequent activity
  - 8-10+ years liquidity is more constrained again
    - Given the contraction in the global Gold hedge book over the last 12 years, activity in the Gold forward market from the Producer sector on the sell side has decreased (ex project finance related trades). However, JP Morgan as a market leading participant in the Gold market has an active and mature Gold derivatives portfolio that affords us the ability to effectively execute and manage large-scale hedge programs.
- Volumes:
  - The Gold Spot Market is very liquid
    - We estimate approximately 3-5mio oz goes through the OTC Gold spot market each day
    - Approximately 14-16mio oz goes through COMEX
    - We estimate that you could execute up to 1mio oz over 1 day on a active trading day; 5mio oz over approximately 1 week
  - The Forward component is where liquidity can become an issue on the sell side given historical low interest rates
    - E.g. 1mio oz per year out 5 yrs (5mio oz total) would take approximately 2-3 weeks to execute due to the forward component of the risk

The Copper Market

Copper is the next most liquid base metal after Aluminium

- Tenors:
  - Cash to 18mths - the most liquid time buckets
  - 18mths to 4 years - liquidity is more constrained due to infrequent activity
  - 4-7 years liquidity is more constrained again
    - JP Morgan has considerable experience with respect to hedge execution in the base metals market, having executed some of the largest hedge programs in recent years.
- Volumes:
  - Most of the volume goes through the 3M
    - On a normal volume day we would expect around 300-500K metric tonnes to go through the 3M
    - On a high volume day we would expect around 750K-1mio metric tonnes to go through the 3M
  - The Forward component is where liquidity can become an issue
    - E.g. 100K metric tonnes per year out 3 years would take approximately 1 week to execute

Execution

The Right Counterparty is Key

- More than ever before, the careful selection of the right counterparty (with sufficient financial strength, ability to warehouse risk, experience in handling large commodity transactions, and global reach to source liquidity) and the appropriate method of execution are the most important factors in the success of large commodity hedging programs
- Important considerations in the selection of the hedging counterparty
  - The recent financial crisis has significantly affected the capitalization of a number of players in the industry, reducing their ability to warehouse commodity market risk and raising concerns of counterparty credit risk for clients
  - A number of traditional pure investment banking players have also seen their funding sources dry-up, which has increased their funding costs significantly (higher funding costs ultimately translate in less competitive prices on hedges)
  - There are few participants that have experience in executing large commodity hedging programs (an inexperienced player can handle the execution poorly leading to undesirable results)
  - There are few houses with sufficient in-house trading flows and global reach (to source interest on the other side of the trade with clients) to create significant liquidity outside the exchanges

Method of execution

- Choosing the wrong method of execution can prove very costly and can yield undesirable results such as
  - Allowing experienced players in the market to recognize that there is a large program being executed, who can try to "front-run" the program moving the price unfavourably for the client
  - Locking-in poor prices on the hedge, due to unnecessary "slippage"
  - Not being able to execute the full targeted volumes
  - Increasing uncertainty unnecessarily due to lack of speed - the slower the program is executed the greater the probability that external factors can affect the market levels unfavourably
  - Working with an institution without the ability to warehouse risk internally: i.e. not a REAL market-maker in Gold. This "back-to-backing" of risk demonstrates a lack on in-house capabilities and can result in increased costs, higher visibility to the market (a 3rd party will need to take the risk), and lead to inefficient execution

J.P. Morgan can offer unique strengths under all key selection considerations

Counterparty considerations	
Financial strength	J.P. Morgan's strong capitalization and funding structure relative to competition, reduces its credit risk as a counterparty for clients
Ability to warehouse risk	J.P. Morgan's strong capitalization allows it to warehouse more market price risk than most competitors
Experience in handling large commodity transaction	There are few participants that have experience in executing large commodity hedging programs (an inexperienced player can handle the execution poorly leading to undesirable results) J.P. Morgan has facilitated a number of large, complex strategic programs for volumes that far exceeded the then prevailing liquidity on the exchanges. Its ability to do so successfully is predicated on its global reach of clients as one of the largest commodity franchises in the industry
Global reach to source liquidity	There are few players with sufficient in-house trading flows and global reach (to source interest on the other side of the trade with clients) to create significant liquidity outside the exchanges
Partnership	J.P. Morgan actively looks to support clients beyond just the execution. We actively work with clients to provide training, market colour, advise on operational issues, and ongoing valuations

Metals Industry Solutions

		Financing / Funding Relief	Optimize Assets	Hedging
Financing Solutions	Prepaid offtakes	✓	✓	✓
	Reserve Based Lending	✓	✓	✓
	Project Finance	✓	✓	✓
	Earn Outs	✓	✓	✓
Price Risk Management	Operational Hedge Programs		✓	✓
	Strategic: Capital Projects; Sovereign	✓	✓	✓
	Illiquid Underlyings: Regional & Quality Differentials	✓	✓	✓
	M&A-Related (e.g. deal contingents, hedgebook monetisation/restructuring etc.)	✓	✓	✓
Physical Off-take	Indexed-price offtake		✓	✓
	Contract Monetisation: Upfront Flexibility Payments	✓	✓	✓
	Physical offtake with embedded price risk management	✓	✓	✓

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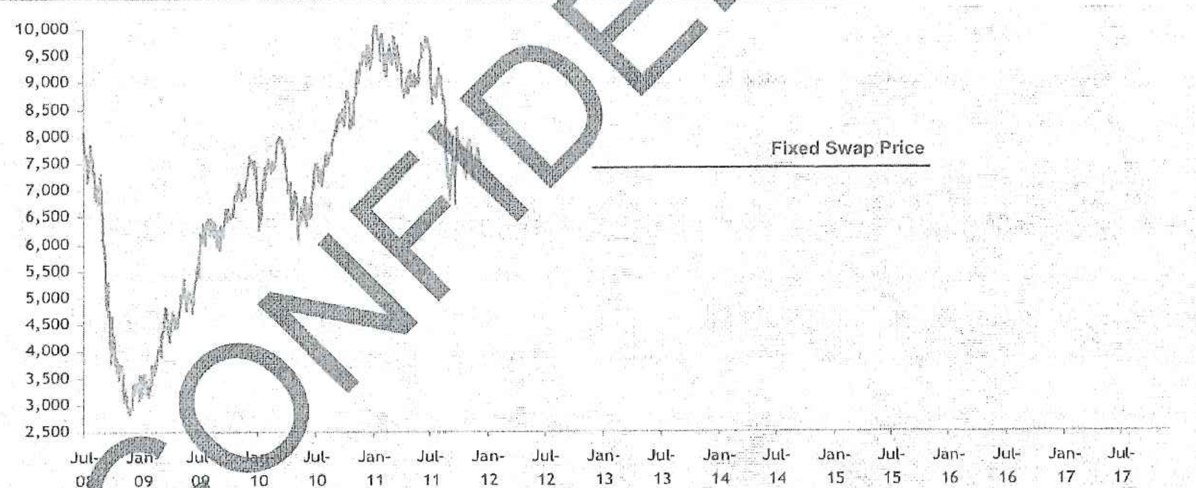
FRB-PSI-200853 - 856

Copper Swaps

Buyer	J.P. Morgan
Settlement	Cash settled monthly against the official LME cash average
Periods	Cal 13 – Cal 15
Indicative Fixed Price	$7410 per mt

*Basis Copper 3M price reference of $7500 per mt, and assuming a market parcel size

Copper Price History and Current Forward Curve ($ per mt)



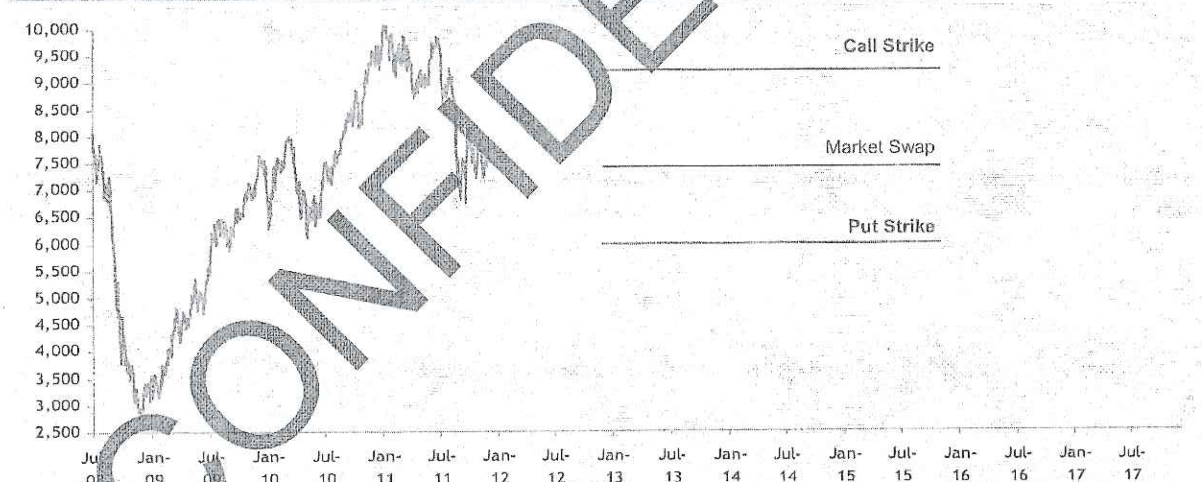
Source: JPMorgan 5 January 2012

Copper Zero Cost Collars

Buyer	J.P. Morgan
Expiry	Cash settled monthly against the official LME cash average
Periods	Cal 13 – Cal 15
Bought Put Strike	$6000 per mt
Sold Call Strike	$9225 per mt

*Basis Copper 3M price reference of $7500 per mt, and assuming a market parcel size.

Copper Price History and Current Forward Curve ($ per mt)



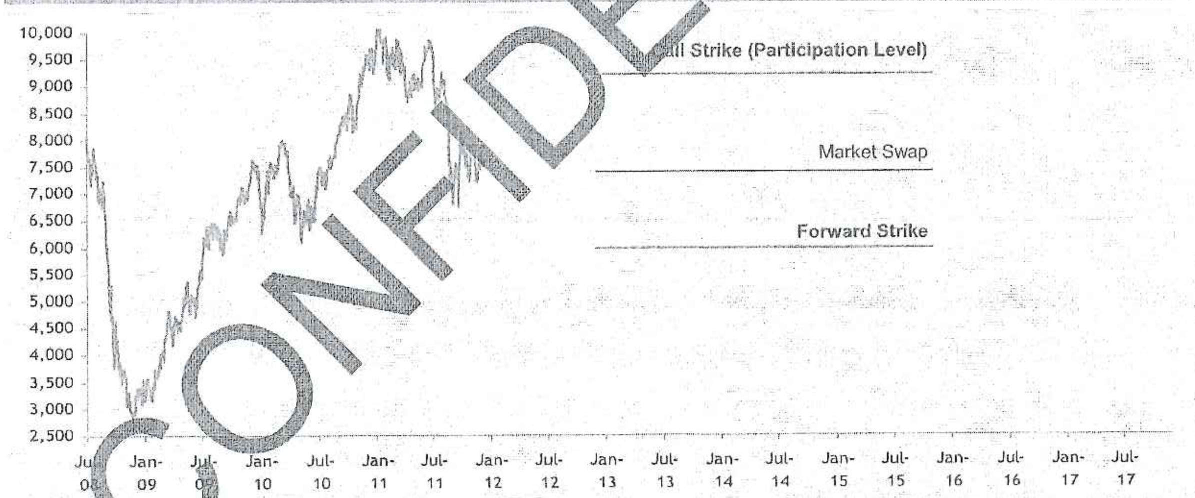
Source: JPMorgan 5 January 2012

Copper Participator

Buyer	J.P. Morgan
Expiry	Cash settled monthly against the official LME cash average
Periods	Cal 13 – Cal 15
Forward Strike	$6600 per mt
Bought Call Strike	$10000 per mt

*Basis Copper 3M price reference of $7500 per mt, and assuming a market parcel size

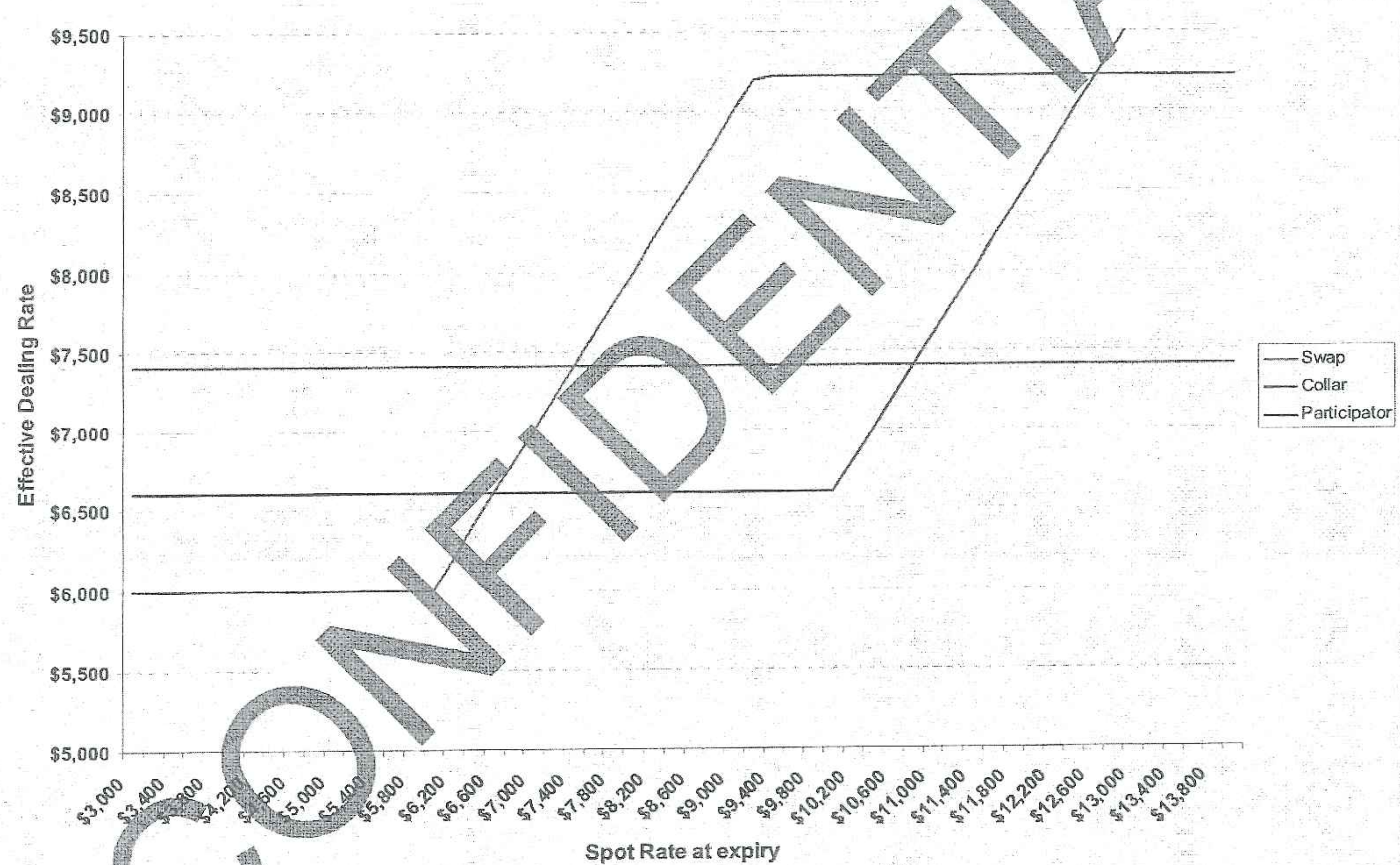
Copper Price History and Current Forward Curve ($ per mt)



Source: JPMorgan 5 January 2012

Copper Hedge Strategy Comparison

Payoff Diagram



J.P.Morgan

Financing Solutions

J.P. Morgan has experience in tailoring business solutions to clients' specific needs	
Prepay	Producer commits to deliver to J.P. Morgan a fixed amount of its production on a monthly basis. In exchange, producer receives upfront payment for the production committed, based on the present value of the monthly forward prices.
Reserve-Based Lending	J.P. Morgan advances funds based on a probability-weighted assessment of client's existing reserves. Allows for additional financial flexibility in the case of non-producing assets or assets in the development stage.
Pre-Export Finance	Loan payments are backed by a pledge of future commodity production volumes. Hedge structure can reduce volumes pledged, thereby increasing debt capacity. J.P. Morgan acting as offtake counterparty creates a credit enhancement for the producer.
Project Finance	J.P. Morgan advances funds ahead of project completion in exchange for subsequent payments linked to underlying commodity. Structure can be used for brownfield and greenfield projects.
Earn-Outs (M&A Related)	Reduces the cash component of bid price in asset acquisition finance or M&A deals by making additional payments contingent upon upward market movements in the commodity underlying. Bidder potentially avoids over-paying for asset if market subsequently falls.

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Agenda

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Permanent Subcommittee on Investigations
EXHIBIT #80

FED / OCC QUARTERLY MEETING

February 12, 2013

EXCERPT

J.P.Morgan

Physical Inventory Limits from FED & OCC

JPMVEC & Non Bank subs Physical Inventory ($'000)

Business	As of 6/29	As of 9/28	As of 12/31
Oil	1,560,144	3,239,254	3,131,901
Freight	121,145	91,590	99,35[illegible]
Tolls	2,076,409	2,006,367	1,92[illegible]29
Gas, Emissions & Coal	510,375	531,138	[illegible]2,353
Base Metals & Other	638,632	759,786	167,[illegible]78
Total Physical Inventory JPMVEC & Non Bank subs	4,906,705	6,628,13[illegible]	[illegible]58,81[illegible]
Physical Inventory as % of Tier 1 Capital	**3.1%**	**4.5%**	**4.0%**
Tier 1 Capital	155,811,000	1[illegible]5,425,0[illegible]	154,69[illegible],000
4% Reporting Requirement	6,232,[illegible]	[illegible]5,93[illegible]00	6,187,880
5% Limit	7,[illegible],550	7,[illegible]1,25[illegible]	7,734,850
Under/(over) Reporting Requirement	[illegible]325,7[illegible]	([illegible]1,135)	29,065
Under/(over) Limit	2,8[illegible]845	793,115	1,576,035
Base Metals held in Bank	6,305,101	8,157,397	6,484,193
Total Consoldiated Inventory Positions	11,211,806	14,785,531	12,643,008

- Inventory is closely monitored and approval for a material physical inventory transaction is required for JPMVEC & Non Bank subs
- Temporarily triggered the 4% reporting threshold in Q3 as a result of Project Liberty. This increase was fully anticipated
- Tolls, which represent 25% usage of the limit, are long-dated, highly illiquid transactions which receive no netting benefit for re-tolls. Expected to amortize down materially by 2018

Bank Inventory subject to OCC 5% limit

Base Metals held in Bank	Trading Notnl (MT)	Warrant Notnl (MT)	Daily Ratio
As of 6/29	73,228,[illegible]61	2,657,485	3.63%
As of 9/28	76,02[illegible],313	2,983,825	3.92%
As of 12/31	[illegible],622,737	2,356,879	3.16%

- Physical volume (Warrant Notional) is monitored against our financial trading notionals and reported daily to the OCC

J.P.Morgan

From: Jennifer Gallagher [mailto:jennifer.c.gallagher@frb.gov]
Sent: Tuesday, October 28, 2014 1:12 PM
To: Bean, Elise (HSGAC)
Subject: RE: Outstanding requests

[redacted]

With respect to the copper question, the Federal Reserve is not bound by the OCC's definition of "bullion" for purposes of the National Bank Act, but section 225.28(b)(8)(iii) of the Federal Reserve's Regulation Y allows BHCs to buy, sell, and store gold, silver, palladium, platinum, and copper as activities closely related to banking. Under the Federal Reserve's regulations copper is treated similarly to gold in the hands of bank holding companies. Since copper can be held under this separate authority, rather than complementary authority or section 4(o) authority, holdings of copper would not need to be counted by a financial holding company towards the 5% complementary limit or the section 4(o) limit on grandfathered activities.

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Permanent Subcommittee on Investigations
EXHIBIT #81

From: Ross, Steven [mailto:sross@AKINGUMP.COM]
Sent: Thursday, October 23, 2014 5:29 PM
To: Bean, Elise (HSGAC)
Cc: Prober, Raphael; Greer, Megan
Subject: Response to your question from earlier today

In response to your earlier email seeking clarification regarding legal entities. JPMorgan conducts the majority of its base metal trading through the Bank and also through a UK sub of the Bank, J.P.Morgan Securities plc., which is a Category 1 ring dealer on the LME. There is also a small amount of activity through JPMorgan Ventures Energy Corp.

· The Bank engages in OTC derivatives with clients and holds warrants as hedges;
· J.P.Morgan Securities plc. as a ring-dealing member, is a market-maker on the LME.

The metals desk employees are employed by the Bank or by J.P.Morgan Securities plc. They are empowered to act for other legal entities within the JPM group through service agreements that are in place between entities and through "dual-hatting" arrangements, whereby individuals can be officers of more than one legal entity in the group.

Steve Ross
Akin Gump

Akin Gump
STRAUSS HAUER & FELD LLP

STEVEN R. ROSS
202.887.4343/fax: 202.887.4288
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October 31, 2014

VIA HAND DELIVERY

The Honorable Carl Levin
Chairman
Permanent Subcommittee on Investigations
Committee on Homeland Security & Government Affairs
United States Senate
Russell Senate Office Building, SR-199
Washington, DC 20510

Re: JPMorgan Chase & Co's Responses to Follow-Up Questions

Dear Chairman Levin:

On behalf of JPMorgan Chase & Co ("J.P.Morgan"), I write in connection with your questionnaire dated January 11, 2013 regarding physical commodities. This submission includes further information and documents responsive to the additional questions posed by your staff on October 13, 2014. As discussed with your staff, J.P.Morgan is working to provide the balance of the follow-up information requested. In addition, J.P.Morgan is compiling the relevant trade records referenced below and will submit those to the Subcommittee next week. J.P.Morgan's response to the specific question below is as follows:

Question 15: Please confirm that JPMorgan purchased approximately $1.5 billion of physical copper in late 2010. If so, please provide details regarding the position, including the purpose and the tonnes involved.[1]

Response: J.P.Morgan's positions generally (with respect to copper and other metals as well) are driven by its customer business, which includes, amongst others, commodity trading advisors ("CTAs"), investor clients, and producers/consumers of metal. With respect to J.P.Morgan's metals positions in 2010, a large portion of these positions were attributable to the fact that its clients (particularly CTAs and investor clients) generally had long positions, did not want to take physical delivery of the metal as those positions became due, and so were looking to roll those

[1] And additional related information requested by Subcommittee staff in subsequent conversations.

PSI-JPMorgan-18-000001

Permanent Subcommittee on Investigations
EXHIBIT #83

positions forward. As a result, clients lent (i.e. sold and then entered into forward contracts to repurchase) their metal to J.P.Morgan, which left J.P.Morgan long inventory and short forwards. J.P.Morgan could, in turn, either lend the metal to the market or take it up and pay warehouse rent for the metal. This is consistent with J.P.Morgan's role as market-maker, liquidity provider, and financial intermediary.

We believe that J.P.Morgan's copper warrant positions in December 2010 are consistent with this general framework. While these trades were several years ago and the J.P.Morgan traders thus do not have specific recollections of the individual trades, J.P.Morgan has reviewed the contemporaneous trade data to determine the following: in late 2010, J.P.Morgan's copper warrant position on the LME reflected its ongoing and sustained trading activity, including trades involving more than 50 different J.P.Morgan clients. The trade data does not appear to support the theory that J.P.Morgan's copper warrant position was the result of a single large trade.

As detailed in the charts below,[2] in early December 2010, J.P.Morgan's copper inventory (meaning all copper inventory owned by J.P.Morgan, most of which was on warrant) ranged from approximately 198,000 metric tonnes to 213,000 metric tonnes. At this time, official LME copper warrants were approximately 350,000 metric tonnes.[3] Thus, J.P.Morgan's total copper book included cash/warrants of approximately 57% to 61% of LME copper warrants.[4] Of course, LME copper is but one portion of the global copper market.[5]

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[2] J.P.Morgan has included data beyond that of December 2010 in order to present a fuller view of its total copper inventory during this time period. In addition, the daily values of J.P.Morgan's copper inventory, as determined at the close of business in New York, are included in the enclosed chart, which has been marked as JPM-COMM-PSI-000064 to JPM-COMM-PSI-000066. It is also important to note, regarding this daily data, that LME trading activity frequently clusters around the third Wednesday of the month (the "monthly prompt date"). These dates, such as November 17, 2010 and December 15, 2010, generally are amalgamations of hundreds or more client-driven trades on the LME.

[3] Just like LME members' positions change from day-to-day, the total inventory of LME copper frequently fluctuates. For instance, according to public reports, the amount of LME copper had decreased from approximately 550,000 metric tonnes in February 2010 to approximately 350,000 metric tonnes ten months later. *See* Carolyn Cui & Dan Fitzpatrick, "Big Bank Sitting On A Big Pile Of Copper," WALL STREET JOURNAL, Dec. 7, 2010.

[4] Exact figures would of course depend on the precise amount of LME copper warrants on a given day.

[5] Around the end of 2010, refined copper global production was reportedly approximately 18 million metric tonnes per annum and global stocks were 2.5 million metric tonnes. Thus, J.P.Morgan

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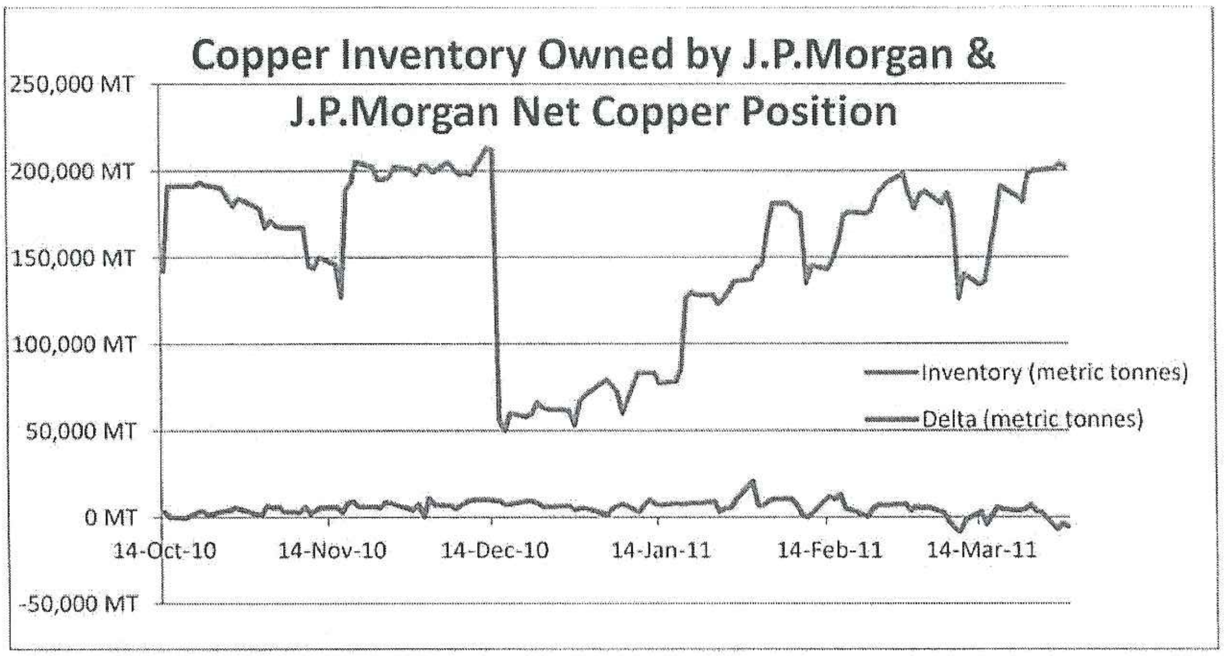
STRAUSS HAUER & FELD LLP

In the first chart, we have provided J.P.Morgan's total copper inventory, by day, in addition to its net copper position, which represents the delta between J.P.Morgan's long inventory and short forwards.



The second chart details more fully the blue line above, showing J.P.Morgan's net copper position. As you can see, during the December 2010 timeframe the Subcommittee Staff has asked about, J.P.Morgan's net copper position ranged from short 50 metric tonnes to long 10,875 metric tonnes.

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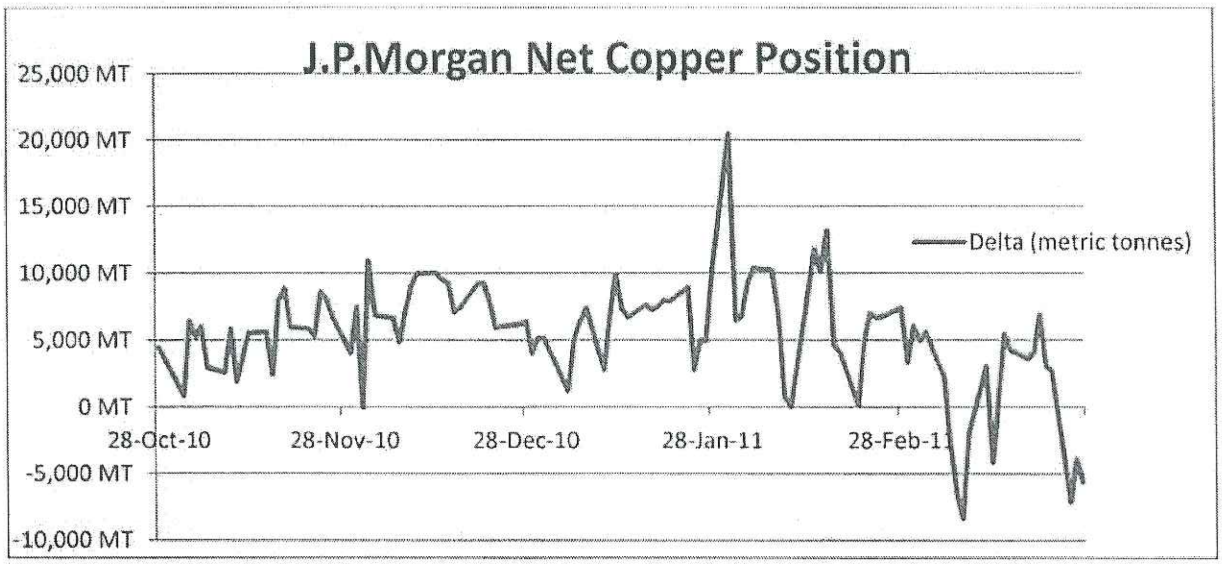
holding even 61% of LME copper warrants on a particular day would have been equivalent to approximately 9% of global copper stocks and approximately 1% of refined copper global production.



It is not unusual for entities to hold large positions of LME metals as part of their overall portfolios, and the LME has rules addressing concentrated holdings to ensure that these holdings are made available to the market at mandated borrowing rates, thereby avoiding any possibility of a supply squeeze. In 2010, there were more than 600 instances of this so-called "Lending Guidance," which occurs when a member or client holds 50% or more of the warrants and/or cash in relation to stocks.[6] In accordance with these guidelines, because J.P.Morgan's warrant position in late 2010 was slightly greater than 50% of LME copper warrants, it quickly made plans to sell a portion of this metal back to the market. This was accomplished on December 15, 2010, when J.P.Morgan delivered copper back to the market and J.P.Morgan's inventory

[6] The LME also confirmed in early December 2010 that the recent copper market activity was "not unusual." At that time, LME head of compliance Diarmuid O'Hegarty was quoted as saying, "The LME has noted recent comments about the current circumstances in the copper market. Such circumstances are not unusual and the exchange is exercising its well established procedures for maintaining an orderly market." *See* Louise Armitstead & Rowena Mason, "JP Morgan revealed as mystery trader that bought £1bn-worth of copper on LME," THE TELEGRAPH, Dec. 4, 2010. According to that same article, Mr. O'Hegarty "added that large trades were not a cause for concern because the market's rules dictate that holders have to lend out a proportion of their stock to ensure a smooth supply of the metal." *See id.*

Akin Gump
STRAUSS HAUER & FELD LLP

decreased to 56,000 metric tonnes. Accordingly, J.P.Morgan's total copper inventory reduced to roughly 16% of LME copper warrants at that time.[7]

Finally, we note that J.P.Morgan's copper holdings during this timeframe, and at all other times, were related to its customer business and not to the then-proposed JPM XF^{SM} Physical Copper Trust (the "Copper ETF"). As discussed with Subcommittee staff, J.P.Morgan looks forward to providing a telephone briefing on this subject next week.

As we have also discussed with Subcommittee staff, J.P.Morgan currently has no plans to launch the Copper ETF in the foreseeable future. However, even if the Copper ETF were to launch, it would have nothing to do with J.P.Morgan's trading books related to its customer business.

* * *

Redacted By
Permanent Subcommittee on Investigations

Please let me know if you have any questions.

Sincerely,

SRoss / my
Steven R. Ross
Counsel for JPMorgan Chase & Co

cc: The Honorable John McCain, Ranking Member

[7] Again, this is measured against an approximate 350,000 metric tonnes of LME copper stock.

Daily Copper Inventory Owned by J.P.Morgan & J.P.Morgan Net Copper Position

Date	Inventory (metric tonnes)	Delta (metric tonnes)
14-Oct-10	142,350	3,000
15-Oct-10	191,000	(300)
18-Oct-10	191,075	(600)
20-Oct-10	191,150	2,450
21-Oct-10	193,275	3,425
22-Oct-10	191,574	1,200
25-Oct-10	190,000	3,400
26-Oct-10	184,000	3,425
27-Oct-10	179,475	5,200
28-Oct-10	184,000	4,400
1-Nov-10	178,000	800
2-Nov-10	167,000	6,375
3-Nov-10	171,000	5,200
4-Nov-10	168,000	5,975
5-Nov-10	167,000	2,925
8-Nov-10	167,000	2,575
9-Nov-10	167,000	5,825
10-Nov-10	145,000	1,875
11-Nov-10	144,000	3,700
12-Nov-10	150,000	5,500
15-Nov-10	146,000	5,600
16-Nov-10	127,000	2,400
17-Nov-10	189,000	7,900
18-Nov-10	193,000	8,800
19-Nov-10	205,000	5,950
22-Nov-10	202,000	5,825
23-Nov-10	195,000	5,275
24-Nov-10	195,000	8,575
25-Nov-10	196,000	8,025
26-Nov-10	202,000	6,725
29-Nov-10	201,000	4,000
30-Nov-10	198,000	7,425
1-Dec-10	203,000	(50)
2-Dec-10	203,000	10,875
3-Dec-10	199,000	6,825
6-Dec-10	205,000	6,625
7-Dec-10	201,000	4,825
8-Dec-10	198,000	7,025
9-Dec-10	199,000	9,000
10-Dec-10	198,000	9,950
13-Dec-10	213,000	10,000
14-Dec-10	212,000	9,500
15-Dec-10	56,000	9,250
16-Dec-10	50,000	7,050
17-Dec-10	60,000	7,375
20-Dec-10	58,000	9,150

Date	Inventory (metric tonnes)	Delta (metric tonnes)
21-Dec-10	60,000	9,225
22-Dec-10	66,000	7,825
23-Dec-10	63,000	5,900
24-Dec-10	62,000	6,000
27-Dec-10	62,000	6,150
28-Dec-10	61,000	6,375
29-Dec-10	53,000	4,000
30-Dec-10	66,000	5,125
31-Dec-10	70,000	5,125
4-Jan-11	79,000	1,200
5-Jan-11	76,000	5,000
6-Jan-11	72,000	6,300
7-Jan-11	60,000	7,375
10-Jan-11	83,000	2,750
11-Jan-11	83,000	6,900
12-Jan-11	83,000	9,900
13-Jan-11	83,000	7,300
14-Jan-11	77,000	6,700
17-Jan-11	78,000	7,600
18-Jan-11	85,000	7,200
19-Jan-11	126,000	7,450
20-Jan-11	130,000	7,950
21-Jan-11	128,000	7,850
24-Jan-11	128,000	8,900
25-Jan-11	123,000	2,750
26-Jan-11	126,000	4,975
27-Jan-11	131,000	4,900
28-Jan-11	136,000	9,950
31-Jan-11	137,000	20,450
1-Feb-11	144,000	6,400
2-Feb-11	146,000	6,750
3-Feb-11	166,000	9,225
4-Feb-11	181,000	10,350
7-Feb-11	181,000	10,225
8-Feb-11	177,000	6,875
9-Feb-11	175,000	750
10-Feb-11	135,000	-
11-Feb-11	145,000	2,675
14-Feb-11	143,000	11,750
15-Feb-11	149,000	10,100
16-Feb-11	159,000	13,125
17-Feb-11	174,000	4,625
18-Feb-11	176,000	4,000
21-Feb-11	175,000	100
22-Feb-11	176,700	4,925
23-Feb-11	185,000	6,950
24-Feb-11	189,000	6,625
25-Feb-11	193,000	6,725
28-Feb-11	198,000	7,350

Date	Inventory (metric tonnes)	Delta (metric tonnes)
1-Mar-11	186,000	3,325
2-Mar-11	178,000	6,025
3-Mar-11	186,000	4,925
4-Mar-11	188,000	5,550
7-Mar-11	181,000	2,175
8-Mar-11	187,000	(2,950)
9-Mar-11	177,000	(6,600)
10-Mar-11	126,000	(8,400)
11-Mar-11	140,000	(2,092)
14-Mar-11	134,000	3,025
15-Mar-11	136,000	(4,175)
17-Mar-11	171,000	5,400
18-Mar-11	191,000	4,250
21-Mar-11	185,000	3,575
22-Mar-11	182,000	4,125
23-Mar-11	198,000	6,825
24-Mar-11	200,000	3,025
25-Mar-11	200,000	2,650
28-Mar-11	201,000	(7,150)
29-Mar-11	204,000	(3,925)
30-Mar-11	202,000	(5,650)

Comptroller of the Currency
Administrator of National Banks

Washington, D.C. 20219

Interpretive Letter No. 553
May 1991

May 2, 1991

Mr. Frank J. Murphy, Jr.
Vice President and Associate Legal Counsel
NCNB Corporation
Charlotte, NC 28255

Dear Mr. Murphy:

This responds to your operating subsidiary notice indicating that NCNB National Bank of North Carolina wishes, through an operating subsidiary, to engage in brokerage of gold, silver, and platinum coins and bullion. For the reasons given below, we have determined that this activity is permissible.

National banks have express authority to buy and sell "coin and bullion". 12 U.S.C. § 24(7). In the past, the OCC has permitted national banks to buy and sell, as agent for customers and for the bank's own account, gold, silver, and platinum coins, and gold and silver bullion. We have not permitted national banks to buy and sell platinum in bullion form because platinum was not widely used in making legal-tender coins and so was not generally regarded as "bullion". Recently, however, several countries have introduced platinum coins. Although most dictionary definitions of "bullion" continue to mention gold and silver only, the term "bullion" is frequently used in financial reporting to describe platinum coins and bars.[1] Nearly all courts called upon to define "bullion" have defined it as "gold or silver intended to be coined". However, none of these cases directly addressed the possibility that other precious metals could also be bullion. Further, numerous state statutes refer to platinum bullion, and at least one explicitly defines "bullion" to include platinum. Statutory definitions of "precious metals" generally include platinum as well as gold and silver.

These authorities indicate that the scope of the term "bullion" has expanded, and that it should now be read to include platinum

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[1] <u>See</u>, <u>e.g.</u>, Wall St. J., November 17, 1988, at C16; N.Y. Times, September 11, 1988, at 66; Wall St. J., August 22, 1988, at 23; N.Y. Times, May 19, 1987, at D14.

Permanent Subcommittee on Investigations
EXHIBIT #84

as well as gold and silver. Trading in platinum bullion is therefore within banks' express power to buy and sell bullion. Alternatively, trading in platinum bullion can be viewed as functionally equivalent[2] to trading in platinum coins (since both forms of platinum trade based on the value of the underlying metal), and therefore incidental to banks' express power to trade in coins. You may, therefore, proceed with your proposal.

Sincerely,

J. Michael Shepherd

J. Michael Shepherd
Senior Deputy Comptroller

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[2]In M & M Leasing Corp. v. Seattle First National Bank, 563 F.2d 1377 (9th Cir. 1977), cert. denied, 436 U.S. 956 (1978), the court found that the leasing of personal property is incidental to the business of banking under the Arnold Tours test because a property lease is "functionally interchangeable" with a loan of money secured by the leased property. 563 F.2d at 1383.

12 U.S.C. 24(7)5
12 U.S.C. 24(7)6

Comptroller of the Currency
Administrator of National Banks

Washington, DC 20219

Interpretive Letter No. 693
December 1995

November 14, 1995

Re: National Bank May Buy and Sell Copper Pursuant to 12 U.S.C. § 24(Seventh)

This is in reply to your letter requesting that the OCC confirm your opinion that (" "), a wholly-owned operating subsidiary of , may expand its activities to include buying and selling copper pursuant to a national bank's express authority to buy and sell "coin and bullion" under the National Bank Act.[1] For the reasons set forth below, it is our view that 12 U.S.C. § 24(Seventh) authorizes a national bank to buy and sell copper under this enumerated power and as part of or incidental to the business of banking. For the reasons discussed below, the OCC concludes that it is legally permissible for national banks to buy and sell copper and conduct financial derivatives activities with regard to the underlying commodity.[2]

I. Background

is currently buying and selling gold, silver, platinum, and palladium. You indicate that this business is conducted in conformity with written policies and procedures, and in accordance with established market practices and regulations relating to these metals. The company wishes

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[1] See 12 U.S.C. § 24(Seventh).

[2] We address financial derivatives transactions in this response because you indicate that will engage in hedging activities with copper.

to add copper to its metals activities, and justifies this on several grounds.

The first is that their established policies, practices, procedures and experiences in dealing with precious metals gives them the expertise necessary to buy and sell copper. Secondly, notes that there is an increasing similarity between transactions involving copper and those transactions already being conducted by national banks with respect to gold, silver, platinum, and palladium ("GSP&P"). There is also a similarity between the policies, methods and procedures already administered by with respect to its GSP&P transactions and those required for the administration of copper transactions. perceives an expanding need from business and industry, including their existing customer base, for a reliable source of supply and financing of refined copper and use of copper as a vehicle for hedging market risk. Finally, believes the benefit in offering a product to the community which is appropriately offered by a bank subsidiary experienced in metals transactions will enhance 's competitive position in relation to non-bank metals dealers.

II. The National Bank Act

A national bank may engage in activity pursuant to 12 U.S.C. § 24(Seventh) if the activity is part of or incidental to the business of banking. The OCC previously has concluded that national banks have authority to buy and sell, as agent for customers and for the bank's own account, gold, silver, platinum and palladium coins and bullion pursuant to the enumerated power in 12 U.S.C. § 24(Seventh) to buy and sell "exchange, coin, and bullion."[3]

A. Enumerated Power to Buy and Sell Coin and Bullion

Paragraph Seventh of 12 U.S.C. § 24, authorizing the purchase and sale of "coin and bullion", does not define the terms. While the section does not specify that copper may be bought and sold under this enumerated power, neither does it place a limitation on the types of metals that constitute coin and bullion.

The OCC has previously concluded that the term "bullion" includes uncoined gold and silver in bar or ingot form, consistent with the first dictionary definition of the term "bullion" as "gold or silver considered as so much metal."[4] See Banking Circular 58 (Rev.)(November 3, 1981) ("BC-58"). This circular also defines the term "coin" as coins held for their metallic value which are minted by a government, or exact restrikes of such coins minted at a later date by or under the authority of the issuing government. The OCC has concluded that the term "bullion"

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[3] Interpretive Letter No. 553 (May 2, 1991), reprinted in [1990-1991 Transfer Binder] Fed Banking L. Rep. (CCH) ¶ 83,300; see also Interpretive Letter No. 648 (May 4, 1994), reprinted in [1994 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 83,557.

[4] Webster's Ninth New Collegiate Dictionary 186 (1986). See also U.S. Department of Interior Bureau of Mines, A Dictionary of Mining, Mineral, and Related Terms 150 (1968)

also includes platinum[5] and palladium.[6] This conclusion was supported by several considerations: market developments indicating that platinum and palladium were part of the bullion banking market, the other common dictionary definition of "bullion" as "metal in the mass", the minting of platinum and palladium coins,[7] and the fact that some state law definitions of "precious metal" included platinum and palladium. In reaching the conclusion that "bullion" encompassed platinum and palladium, the OCC indicated that other metals also may be characterized as bullion.

One of the definitions of bullion is "metal in the mass."[8] Another definition is "quantities of gold, silver or copper coins when measured by weight."[9] Other dictionary definitions of bullion mention gold, silver, or the term "precious metal."[10] A number of state laws now include copper in their statutory definitions of "precious metals"[11], and at least one state statute explicitly refers to copper in bullion form.[12]

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[5] Interpretive Letter No. 553, supra.

[6] Interpretive Letter No. 683 (July 28, 1995), reprinted in [1994-1995 Transfer Binder] Fed. Banking L. Rep. (CCH) ¶ 83,631.

[7] Oxford English Dictionary 1170 (Compact ed. 1971). The etymology of the word "bullion" indicates a connection between bullion and the minting of currency. Consistent with the "metal in the mass" definition is the description in The Metals Handbook 6 (8th ed. 1961) of the American Society for Metals, stating that bullion is: "(1) A semirefined alloy containing sufficient precious metal to make recovery profitable. (2) Refined gold or silver, uncoined."

[8] Webster's Third New International Dictionary 294 (1971). See also Charles J. Woelfel, The Dictionary of Banking 35 (1994); Charles J. Woelfel, Encyclopedia of Banking and Finance 160 (10th ed. 1994).

[9] F. E. Perry, A Dictionary of Banking 41 (2d ed. 1983).

[10] See, Thomas P. Fitch, Dictionary of Banking Terms (2d ed. 1990), defines bullion as "gold or other precious metals in bar or coin form." See also American Bankers Association, Banking Terminology 46 (3d ed. 1989), which defines bullion as "unminted precious metals suitable for coining."

[11] See, e.g., Arz. Rev. Stat. Ann. § 44-1801(14)(1994); Cal. Corp. Code § 29515 (West 1995); Colo Rev. Stat. § 11-53-103(13)(1994); Ga. Code Ann. § 10-5A-1(12)(1994); Idaho Code. § 30-1501(1994); Ind. Code Ann. § 23-2-6-15 (Burns 1994); Mont. Code Ann. § 30-10-103 (1994); Neb. Rev. Stat. § 8-1715 (1994); Nev. Rev. Stat. Ann. § 91.140 (1993); Or Rev Stat. § 645.020 (1994); Utah Code Ann. § 61-1-13 (1994).

[12] Nev. Rev. Stat. Ann. § 519.080 (1993).

The factors that supported the OCC's conclusion with respect to platinum and palladium generally support inclusion of copper within the coin and bullion authority of national banks. Copper, like platinum and palladium, has been used to mint legal-tender coins. The United States, China and Britain have issued copper coins.[13] Additionally, copper, like platinum and palladium, is bought and sold as metal in a mass standardized as to weight and purity.[14]

's customers increasingly expect to be able to engage in the full range of metals transactions from a reliable source of supply and financing, and a number of state laws now define the term "precious metal" to include copper. At least one state statute defines "coins" to include monetized bullion or other forms of money manufactured from gold, silver, platinum, palladium or other such metals.[15] Based on the foregoing, it is reasonable to conclude that the trading and dealing of copper is encompassed within the enumerated power of national banks to buy and sell coin and bullion.

B. Business of Banking

The basic framework that governs the powers and permissible activities of national banks was, at last, resolved in a clear fashion by the Supreme Court's recent decision in NationsBank v. Variable Annuity Life Insurance Co. ("VALIC"), 115 S.Ct. 810 (1995). The unanimous Court held that the "business of banking" which is authorized to banks in the National Bank Act ("Act"), 12 U.S.C. § 24(Seventh), is not limited to those activities and powers expressly enumerated in the statute. Rather, the Court found that the business of banking is an expansive concept and that the powers enumerated in the Act are merely illustrative. The Court's decision also reaffirmed that courts should accord deference to reasoned decisions by the OCC interpreting the powers of national banks.

In deciding whether a particular activity is part of or incidental to the business of banking and therefore within the OCC's discretion to permit, it is helpful to apply the criteria which VALIC and prior cases have used in making such determinations. The factors may be framed in the form of questions: (1) Is the activity a contemporary functional equivalent or logical outgrowth of a recognized banking function? (2) Does the activity benefit customers and/or strengthen the bank? (3) Are the risks of the activity similar to the type of risks already assumed by banks?[16]

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[13] See C. Krause, Standard Catalog of 20th Century World Coins (20th ed. 1993).

[14] A two percent tolerance is allowed on the contract weight when delivering with settlement on the delivered weight. A copper contract may be in the form of wirebars or cathodes both with set standard dimensions for delivery and a specific type of copper. Brackenbury, Dealing on London Metal Exchange and Commodity Markets 24-25 (1976).

[15] See Colo. Comm. Code § 39-26-102(1994).

[16] See generally Julie L. Williams & Mark P. Jacobsen, The Business of Banking: Looking to the Future, 50 The Business Lawyer 783, 783-785 (1995) (explaining the VALIC case and the evolution of the "business of banking" concept).

Affirmative responses to such questions lead convincingly to the conclusion that an activity is properly characterized as part of the business of banking in the evolving financial services marketplace. The OCC believes that each of these three factors is satisfied here.

First, the trading activities which will conduct with respect to copper are functionally equivalent to the trading activities it is currently conducting with respect to GSP&P. Copper, along with GSP&P, is available on various commodity exchanges for transactions with and among the general public.[17] Copper is regularly traded over the counter, on the London Metal Exchange ("LME"), and on the COMEX division of the New York Mercantile Exchange ("NYMEX"). As a result, copper prices are found on recognized markets. Options for copper are quoted on the NYMEX, the LME, and in various cash markets. Because copper is quoted and traded on these exchanges, there is a substantial amount of liquidity for it. The administration and policies of relating to copper will be the same as for other precious metals it buys and sells. Additionally, all copper transactions are proposed to be done with approved vendors and only NYMEX and/or London acceptable brands will be accepted. All copper will be subjected to the same testing criteria as GSP&P.

Second, buying and selling copper will benefit 's existing customer base. 's customers have indicated their desire to obtain a reliable source of supply and financing of refined copper. Buying and selling copper will allow to diversify the types of metals that it can offer to its clients for financing, consignment, and hedging. As a result, 's customers will be offered an additional product from a bank subsidiary experienced in metals transactions and not have to go to numerous sources to supply their metal needs. will also be strengthened because it will be better able to compete with non-bank metals dealers by offering a wider selection of metals.

Third, the type of risk associated with buying and selling copper is similar to the risks currently manages in its dealings with GSP&P. anticipates that its copper transactions will constitute only a small percentage of the overall precious metals business and will primarily be customer-driven. Because copper trading activities are functionally equivalent to GSP&P trading activities, will be able to utilize established precious metals policies approved, authorized, and regulated by the OCC in accordance with BC-58.

BC-58 sets forth general safety and soundness guidelines which national banks should implement in their conduct of coin and bullion activities. You indicate that follows the guidance for its GSP&P transactions, and will do so with copper as well. It will subject the copper activities to the same general credit, lending, safekeeping, accounting, and management standards for its other precious metals activities.

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[17] Daniel Rappaport, Merger Yields Stronger Trading Opportunities, American Metal Market, June 7, 1995, at 10A.

The risks posed by engaging in financial derivatives transactions involving copper are also of the type already assumed by national banks in connection with their derivatives activities in other metals. currently engages in hedging activities involving GSP&P for its customers. Because the financial derivative transactions that will engage in with copper are similar to the financial derivative activities involving GSP&P, will be able to utilize established policies developed in accordance with OCC Banking Circular 277 (October 27, 1993) ("BC-277").

BC-277 provides guidelines for banks to apply in conducting their financial derivatives activities in a safe and sound manner. The guidelines address senior management and board oversight, market risk management, credit risk management, liquidity risk management, operations and systems risk management, legal issues, and capital adequacy. currently conducts its financial derivative activities involving GSP&P in accordance with BC-277, and will do the same with copper.

Although the trading risks associated with copper and with GSP&P are similar, copper is different from GSP&P in two ways. Copper is handled in larger quantities than GSP&P, and its prices tend to be more volatile than GSP&P prices. intends to adopt several policies and practices to address the volatile price issue. It will establish smaller trading limits for copper than its existing precious metals trading limits. Inventories of copper will be maintained at minimum levels, the company retaining only enough to satisfy normal commercial demand. Hedging transactions involving copper will be balanced in terms of maturity and quantity. Options related to copper will be employed only to offset commercial demand. And finally, will hire an experienced copper dealer who will report regularly to management.

Because copper is normally handled in larger quantities than GSP&P, 's facilities for copper storage, sale, and physical delivery will be larger those that required for GSP&P. The copper will be stored in COMEX-approved warehouses for copper that meet 's security requirements for precious metals. It will also be transported by approved armored transport carriers.

Based on the above stated reasons, buying and selling copper is part of or incidental to the business of banking authorized in 12 U.S.C. § 24(Seventh), and may buy and sell copper and engage in financial derivatives activity involving copper in accordance with pertinent safety and soundness guidelines.

III. Conclusion

Based on the foregoing, it is my opinion that buying and selling copper and conducting financial derivative activities are encompassed within the enumerated authority of a national bank in 12 U.S.C. § 24(Seventh) to buy and sell coin and bullion, and that such activity is legally permissible as part of or incidental to the business of banking. Please note that buying and selling copper and financial derivatives activity with regard to copper, as described above, are subject to the principles and guidelines set forth in Banking Circulars 58 and 277.

I trust this reply is responsive to your inquiry.

Very truly yours,

Julie L. Williams
Chief Counsel

United States Senate

COMMITTEE ON
HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

WASHINGTON, DC 20510-6250

July 16, 2012

VIA EMAIL (rule-comments@sec.gov)

Elizabeth M. Murphy
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

RE: Proposed Rule Change to List and Trade Shares of the JPM XF Physical Copper Trust Pursuant to NYSE Arca Equities Rule 8.201; Release No. 34-67075; File No. SR-NYSEArca-2012-28

Dear Ms. Murphy:

The purpose of this comment letter is to express concern about a proposed rule change by the NYSE Arca, Inc. ("NYSE Arca") to list and trade shares of JPM XF Physical Copper Trust ("the Trust"), a commodity-based Exchange Traded Fund ("ETF") linked to copper. There is ample evidence that the proposed ETF will disrupt the market supply of copper by removing from the market a substantial percentage of the copper available for immediate delivery. This supply disruption is likely to affect the cash and futures market for copper, increasing volatility and driving up its price to create a bubble and burst cycle. The proposed ETF is unlike any other metal ETF currently listed on the NYSE and would allow speculators to create a squeeze on the market. The proposed rule change is inconsistent with Section 6(b)(5) of the Securities Exchange Act of 1934 ("Act"), which requires that rules be designed to prevent manipulative acts and protect investors and the public interest. This letter respectfully suggests that the proposed rule change should be denied.

Exchange Traded Funds. Exchange Traded Funds enable investors to buy and sell shares in the fund on a stock exchange in the same way that investors can use the stock exchange to buy and sell shares in a corporation. ETFs linked to commodities appeared on U.S. stock exchanges for the first time in 2004, when an ETF linked to gold was offered for sale. Today, retail investors and other market participants can use stock exchanges to buy and sell shares in a wide variety of commodity-based ETFs, some of which track broad commodity indexes, others of which track sub-indexes, and some of which reference a single commodity. By buying and selling these shares, commodity-based ETF traders gain exposure to commodity prices without ever having to transact business on a commodity exchange subject to CFTC oversight.

The particular type of ETF addressed in the NYSE Arca proposal is structured as a trust whose assets are limited to a single physical commodity, copper. The ETF's investment objective is to track the spot price of copper, less trust expenses and fees, and provide its shareholders with exposure to changes in the commodity price. The ETF does not sell or redeem individual shares, but instead sells large blocks or "Creation Units," in units of 2,500 shares each, to broker-dealers or other financial institutions known as Authorized Participants (AP). In return, as a condition of the sale, APs are required to deliver to the ETF a specified amount of the physical commodity to support the value of the ETF shares being issued.

APs then sell the individual ETF shares to investors through the stock exchange. If the commodity price increases, the share values increase, and the investors gain; if the price drops, the share values fall, and investors lose. If the fund attracts more investors, the ETF typically sells more creation units (or blocks of shares) and receives additional physical copper deliveries to support those shares; if investments in the fund decrease, the ETF typically reduces its commodity holdings. The copper underlying the ETF may be purchased in cash markets or in commodity futures markets.

Subcommittee Investigations. The Permanent Subcommittee on Investigations, which I chair, has conducted several in-depth investigations into commodity markets, examining how speculation overwhelms normal supply and demand factors and increases prices at the expense of consumers and American businesses.

In 2006, for example, the Subcommittee released a report which found that billions of dollars in commodity index trading on the crude oil market had pushed up futures prices in 2006, caused a corresponding increase in cash prices, and was responsible for an estimated $20 out of the then $70 cost for a barrel of oil.[1] In 2007, the Subcommittee released a report showing how a single hedge fund named Amaranth made huge, speculative trades on the natural gas market using futures on a regulated futures exchange and swaps on an unregulated electronic energy exchange.[2] These trades pushed up futures prices and increased natural gas prices for consumers and American businesses.

In 2009, the Subcommittee released a bipartisan 260-page staff report and held a hearing examining commodity index trading in the wheat market.[3] One key topic was the impact of commodity index-based ETFs on futures contracts and commodity prices. Essentially, the report found that the purchase of wheat futures contracts to support the commodity index financial instruments, including ETFs, swaps, and exchange traded notes, had created a new demand for those futures contracts; had distorted the prices of those futures contracts by overwhelming normal supply and demand factors; had interfered with the convergence of wheat futures and cash prices; and had hurt American businesses and consumers by causing unreliable wheat prices and hedging failures.

In 2011, the Subcommittee held a hearing on excessive speculation in commodity markets and compliance with the Dodd-Frank Act. We studied the rise of commodity index

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[1] "The Role of Market Speculation in Rising Oil and Gas Prices: A Need to Put the Cop Back on the Beat," U.S. Senate Permanent Subcommittee on Investigations Report, S. Prt. 109-65, June 27, 2006.
[2] "Excessive Speculation in the Natural Gas Market," U.S. Senate Permanent Subcommittee on Investigations Report, S. Hrg. 110-235, June 25 and July 9, 2007.
[3] "Excessive Speculation in the Wheat Market," U.S. Senate Permanent Subcommittee on Investigations Report, S. Hrg. 111-155, July 21, 2009.

funds, commodity-related Exchange Traded Products, and the mutual fund industry.[4] Our investigation discovered that these funds had put billions in speculative money into U.S. commodities markets, causing increased price volatility. The investigation indentified the risk posed to the American economy from unstable prices for materials essential to industry, including copper.[5]

In January of this year, the Subcommittee investigated mutual fund speculation in commodity markets. Through our investigation we learned that IRS private letter rulings had allowed mutual funds to use either wholly-owned offshore corporations or financial instruments called "commodity linked notes" to make unrestricted commodities investments, although the law restricts them from deriving no more than 10% of their income from commodity investments. These investment strategies permitted a flood of billions in new speculative commodity investments.[6]

Copper Market Background. The global copper supply comes either from primary production through the extraction and processing of copper ore or from secondary production through the recycling of copper scrap.[7] The supply of copper is inelastic,[8] in part because extraction from old mines is declining and new mine projects have encountered delays.[9]

Copper is used in vital industries such as the construction, electrical, and electronics industries.[10] It is used to produce cable and wire used in power transmission and generation and in telecommunication, as well as for pipes used in plumbing and heating.[11] Copper demand comes from fabricators and manufacturers who create these products and copper is used as an end product by consumers throughout the world.

The majority of the copper produced annually is sold though long-term supply contracts. While such contracts specify the amount of copper to be delivered, price is typically not fixed until the time of delivery, exposing market participants to price uncertainty.[12] Copper prices tend to experience wide and unpredictable fluctuations.[13] Producers and consumers participate in

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[4] "Excessive Speculation and Compliance with the Dodd-Frank Act," Opening Statement of Senator Carl Levin before the U.S. Senate Permanent Subcommittee on Investigations, November 3, 2011.

[5] *Id.*

[6] "Compliance with Tax Limits on Mutual Fund Commodity Speculation," Opening Statement of Senator Carl Levin before the U.S. Senate Permanent Subcommittee on Investigations, January 26, 2012.

[7] Amendment No. 5 to SEC Form S-1 Registration Statement for JPM XF Physical Copper Trust, July 12, 2011, at p. 32-34 (hereinafter "Registration Statement").

[8] Inelasticity of supply means that an increase in the global demand for copper cannot be met with a short-term increase in supply.

[9] Registration Statement, at p. 32.

[10] *Id.*, at p. 34.

[11] *Id.*, at p. 31.

[12] SEC Notice of Filing of Proposed Rule Change to List and Trade Shares of the JPM XF Physical Copper Trust; Release No. 34-66816; File No. SR-NYSEArca-2012-28, April 16, 2012, at p. 13 (hereinafter "SEC Notice"); available at http://www.sec.gov/rules/sro/nysearca/2012/34-66816.pdf.

[13] Registration Statement, at p. 14.

copper futures exchanges to hedge against this price instability.[14] Speculators also participate in these exchanges, buying price risk in exchange for potential profit.[15]

The London Metal Exchange ("LME") is the largest and most influential copper futures exchange. "As a result of daily trading [of copper futures contracts on the LME], prices are 'discovered' and published by the LME."[16] The LME's prices are then used by producers and commercial end-users around world as the basis for the contract price for the physical purchase or sale of copper.[17] In addition to the base price, copper has an added "locational premia" based on the supply and demand for copper at the location from which it is supplied.[18]

The LME is the main source of information about the physical demand for and supply of copper, because it has traditionally been a "market of last resort" for producers to sell excess stock and consumers to fill short-term needs for copper beyond the amount for which they have contracted.[19] Copper is sold on the LME through "warrants," or "bearer document[s] evidencing the right of the holder to possession of a specified lot of metal at a specified LME warehouse location."[20] Copper sold on the LME must be Grade A and of an "Acceptable Delivery Brand," a brand registered with the LME.[21]

Disrupting Supply. There is ample evidence that if the ETF shares are listed and traded on the NYSE exchange, the Trust will disrupt the global supply of copper. Although the Trust's registration statement cites that in 2008 there was an estimated 2.47 million metric tons of copper stocks in the global copper market, only 390,000 metric tons of this copper was registered with exchanges.[22] The copper registered with exchanges is part of the small percentage of global refined copper stocks that are "liquid stocks" available for immediate delivery.[23] For example, in 2011, total global copper stocks were 3.515 million metric tons while liquid stocks were only 808,000 metric tons.[24]

Of those "liquid stocks," only a small percentage of physical copper is truly available for purchase by third parties. When one removes from the calculation of "liquid stocks" extra copper held by consumers and producers, stocks that are waiting to pass through customs into importing countries, and stocks on the Shanghai Futures Exchange ("SHFE") which are

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[14] SEC Notice, at p. 14
[15] *Id.*
[16] Registration Statement, at p. 40.
[17] *Id.*
[18] SEC Notice, at p. 25
[19] Registration Statement, at p. 41.
[20] *Id.*, at p. 40-41.
[21] *Id.*, at p. 42.
[22] *Id.*, at p. 20.
[23] *Report on Refined Copper Inventories on the Global Market*, Table 3: "Refined Copper Balance Detail," Bloomsbury Minerals Economics Ltd, October 12, 2011 (hereinafter "BME Report"). Available at http://www.sec.gov/comments/sr-nysearca-2012-28/nysearca201228-5.pdf as Exhibit A of Submitted Comment from Robert B. Bernstein, Vandenberg & Feliu LLC, July 13, 2012, p. 15. Bloomsbury Minerals Economics is a specialized consultancy engaged in base metals market and price analysis, focusing in particular on copper.
[24] BME report, Table 3.

unavailable outside of China, it appears that most of the remaining copper stocks available for immediate delivery are on the LME and Commodity Exchange, Inc. ("COMEX").[25]

Additionally, the proposed EFT will accept and hold only Grade A copper of an "Acceptable Delivery Brand," exactly the type of copper on the LME.[26] Thus, even though the copper held by the Trust will not be held through LME warrants,[27] the set-up of the Trust makes it extremely likely that its copper will be acquired from LME warehouses.

In August 2011, the LME reported that it possessed approximately 464,000 metric tons of copper stocks and the COMEX had about 81,000 short tons (or about 73,500 metric tons), giving them combined approximately 537,500 metric tons of copper stocks.[28] As discussed above, copper supply is inelastic, so even with advance warning about an increase in the demand for copper, supply on these exchanges is not likely to increase. According to the Trust's registration statement, the Trust will acquire 61,800 metric tons of copper to back its initial shares.[29] In addition, on June 22, 2012, NYSE Arca filed a rule proposal to list another copper trust, iShares® Copper Trust, sponsored by BlackRock Asset Management International, Inc., which would also significantly increase the demand for physical copper.[30] If BlackRocks's copper ETF is also approved, it will acquire an initial 121,200 metric tons of copper.[31] Together these Trusts would hold approximately 34% of the stocks of copper available for immediate delivery.[32]

Effecting Price. Removing one third of the available copper stocks undoubtedly will affect and increase the price of copper. If the supply of copper available for immediate delivery drops by about 34%, it naturally follows that the price of copper will rise. As the price of copper in the market rises, demand for shares of the Trust will likely increase as well, leading the Trust to create more shares, removing even more copper from the market and further decreasing the liquid supply. This artificial supply and demand pattern is likely to create a boom and bust cycle, as speculators enter and leave the market.

The Trust itself warns that "[b]ecause there is no limit on the amount of copper that the Trust may acquire, the Trust, as it grows, may have an impact on supply and demand for copper that ultimately may affect the price of the shares in a manner unrelated to other factors affecting the global markets for copper."[33]

Moreover, according to the Trust's registration statement, "[p]urchasing activity in the copper market associated with the purchase of Creation Units from the Trust or selling activity

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[25] *Id.* The Commodity Exchange, Inc., or COMEX, is a division of the New York Mercantile Exchange.
[26] Registration Statement, at p. 44.
[27] Registration Statement, at p. 43.
[28] LME Stock Report, J.P.Morgan, 9:07 AM, August 10, 2011.
[29] Jack Farchy, *JPMorgan copper ETF plan would 'wreck havoc,'* Financial Times, May 24, 2012.
[30] SEC Notice of Filing of Proposed Rule Change to List and Trade Shares of IShares Copper Trust; Release No. 34–67237; File No. SR–NYSEArca–2012–66, June 22, 2012.
[31] Jack Farchy, *JPMorgan copper ETF plan would 'wreck havoc,'* Financial Times, May 24, 2012.
[32] *See* LME Stock Report, J.P.Morgan, 9:07 AM, August 10, 2011; and Jack Farchy, *JPMorgan copper ETF plan would 'wreck havoc,'* Financial Times, May 24, 2012.
[33] Registration Statement, at p. 20.

following the redemption of Creation Units may affect the price of copper . . ."[34] There is nothing to prevent high investor demand from causing an increase in copper prices or a quick drop in demand from driving down copper prices. The risk of a bubble in the copper market creates a corresponding risk that the bubble will eventually burst. When it bursts, investors may dump thousands of metric tons of copper back onto the market, swamping the market and depressing the price, and again impacting the world economy at large.

U.S. Impact. The impact on copper supply and price will be strongest in the United States because it is likely that the ETF's copper will come from LME warehouses in the United States. The Trust will likely acquire its initial copper holdings from the location with the lowest locational premia. In addition, of the countries where the Trust has "initially permitted warehouse locations,"[35] the United States is the country with the lowest locational premia.

Moreover, because of the difficulty and expense of transporting copper,[36] it is likely the Trust will acquire its copper in the same location as where it plans to store the copper. The Trust's registration statement says that "under most circumstances, the Trust will hold most of its copper in the warehouse . . . that is in the cheapest-to-deliver location [with the lowest locational premium]. Therefore, that Trust's storage of copper may ultimately be concentrated in only a few warehouse locations or even a single warehouse location."[37] As discussed above, the United States is likely to be that "cheapest-to-deliver location." Also, most of the copper in LME warehouses in the United States is stored by the Henry Bath Group, a J.P. Morgan affiliate, which has been designated the warehouse keeper for the Trust.[38] The Trust could acquire the copper currently stored by Henry Bath for the LME and have it already located in a Trust-permitted warehouse location without any transportation costs.

As of August 2011, there were only about 257,000 metric tons of copper in LME warehouses in the United States and only about 73,500 metric tons in COMEX warehouses, for a total of about 330,500 metric tons of copper stocks available on exchanges in the United States.[39] The Trust's initial 61,800 metric tons alone would remove about 19% of the U.S. supply of copper available for immediate delivery. If BlackRock's 121,200 metric tons are included, these ETFs would remove over 55% of available U.S. copper stocks from the market.

Unlike Existing ETFs. While the SEC permits U.S. exchange sales of commodity-backed ETFs for gold, silver, platinum, and palladium, these metals and their markets are substantially different than copper. These four permitted metals are the only precious metals that are currently treated as world currencies. For this reason, they are commonly held for investment purposes. As a result there are substantial existing supplies of these metals which could be acquired to back an ETF without affecting the world market price in these metals.

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[34] *Id.*, at p. 28.
[35] SEC Notice, at p. 26.
[36] *Id.*, at p. 11.
[37] Registration Statement, at p. 20.
[38] *Id.*, at p. 2.
[39] LME Stock Report, J.P.Morgan, 9:07 AM, August 10, 2011.

Conversely, copper is not currently held for investment purposes because it is, relative to precious metals, very expensive to store and difficult to transport.[40] Because copper has not been held for investment, there is not the same existing supply of copper for the Trust to acquire to back its ETF. Holding copper for investment purposes will have a significantly greater impact on the copper market than ETFs holding palladium, platinum, silver, or gold had on their respective markets and the broader economy.

Squeezing the Market. If the proposed rule change is approved, it will make the copper market more susceptible to squeezes and corners by speculators. Creating this market condition is inconsistent with Section 6(b)(5)'s requirement that exchange rules be designed to prevent manipulative practices. A squeeze on the copper market is when a lack of supply and excess demand forces the price upward, and a corner is when one party acquires enough copper to be able to manipulate its price. A squeeze on the copper market already purportedly occurred this year in April when one entity took control of up to 90% of the cash contracts and inventory on the LME.[41] The ETF will make the market more susceptible to squeezes, because it could be used by market participants to remove copper from the available supply in order to purposefully artificially inflate the price. Moreover, their activities would go undetected by the LME, which conducts surveillance for dominant market participants, because ETFs are not currently subject to any form of commodity regulations. By holding physical copper rather than LME warrants, the Trust can control more of the available supply of copper without triggering LME reporting or rules.

Section 6(b)(5) requires that NYSE rules be designed to prevent manipulative acts and protect investors and the public interest. The proposed rule change is not designed to prevent manipulative acts. To the contrary, it may encourage such acts. This ETF may allow speculators to squeeze or corner the market in copper. If approved, the ETF is likely to distort the global price of copper, leading to a boom and bust pricing cycle which will hurt manufacturers who rely on this essential industrial product and will ultimately hurt consumers and the larger economy. It is not in the public interest for a new investment instrument to disrupt the delicate balance of supply and demand that sets the price for an essential commodity. The proposed rule change will benefit speculators at the expense of consumers and American businesses. The proposed rule change should be denied.

Thank you for this opportunity to comment on the proposed rule.

Sincerely,

Carl Levin

Carl Levin
Chairman
Permanent Subcommittee on Investigations

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[40] Registration Statement, at p. 36-37.
[41] Eric Onstad, *Copper market expects squeeze, big holding appears*, Reuters, July 2, 2012.

United States Senate

COMMITTEE ON
HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS
WASHINGTON, DC 20510-6250

March 11, 2013

VIA U.S. MAIL & EMAIL (davisjz@sec.gov)

The Honorable Elisse B. Walter
Chairman
United States Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549

RE: JPM XF Physical Copper Trust, Form S-1
Registration Statement (Amendment No. 6: filed Jan 17, 2013)

Dear Chairman Walter:

The purpose of this letter is to express concern about the inadequacy of the disclosures in the above referenced Form S-1 Registration Statement (S-1) filing for the JPM XF Physical Copper Trust (JPMXF). The JPMXF registration statement was initially made October 22, 2010, and amended 6 times subsequently. The most recent S-1, filed on January 17, 2013, is incomplete on its face and should not be declared effective until it adequately describes the nature and scope of the activities of JP Morgan Chase & Co and its affiliate entities' (JPMorgan's) in the physical copper market, including its inventory positions and its role in mining, financing, refining, storing, transporting, and trading physical copper; its long and short copper positions in the futures, swaps, and options markets; and its policies, procedures, and practices for pricing services from related parties, identifying and resolving conflict of interest issues, and preventing and detecting any price manipulation, squeezes, corners, and price distortions by JPMorgan affiliates in the copper market.

Absent detailed information on these activities, the S-1's disclosures concerning J.P. Morgan's market power and its potential or actual conflicts of interest are insufficient to meet the requirements of the law. This letter respectfully requests that the Commission, pursuant to its authority under Section 8(b) of the Securities Act of 1933,[1] require more complete disclosure of

[1] Section 8(b) states:

> (b) If it appears to the Commission that a registration statement is on its face incomplete or inaccurate in any material respect, the Commission may, after notice by personal service or the sending of confirmed telegraphic notice not later than ten days after the filing of the registration statement, and opportunity for hearing (at a time fixed by the Commission) within ten days after such notice by personal service or the sending of such telegraphic notice, issue an order prior to the effective date of registration refusing to permit such statement to become effective until it has been amended in accordance with such order. When such statement has been amended in accordance with such order the Commission shall so declare and the registration shall become effective at the time provided in subsection (a) or upon the date of such declaration, whichever date is the later.

Permanent Subcommittee on Investigations
EXHIBIT #86b

these material activities prior to declaring an effective registration statement for JPMXF Physical Copper Trust.

A. Background

Exchange Traded Funds. Exchange Traded Funds (ETFs) enable investors to buy and sell shares in a fund on a stock exchange in the same way that investors can use the stock exchange to buy and sell shares in a corporation. ETFs linked to commodities appeared on U.S. stock exchanges for the first time in 2004, when an ETF linked to gold was offered for sale. Today, retail investors and other market participants can use stock exchanges to buy and sell shares in a wide variety of commodity-based ETFs, some of which track broad commodity indexes, others of which track sub-indexes, and some of which reference a single commodity. By buying and selling these shares, commodity-based ETF traders gain exposure to commodity prices without having to transact business on a commodity exchange subject to oversight by the Commodity Futures Trading Commission (CFTC).

JPMXF in General. According to its filings, JPMXF is structured as a trust whose assets are limited to a single physical commodity, copper. The ETF's investment objective is to track the spot price of copper, less trust expenses and fees, and provide its shareholders with exposure to changes in the commodity price. The ETF does not sell or redeem individual shares, but instead sells large blocks or "Creation Units," in units of 2,500 shares each, to broker-dealers or other financial institutions known as Authorized Participants (AP). In return, as a condition of the sale, APs are required to deliver to the ETF a specified amount of the physical commodity to support the value of the ETF shares being issued. APs then sell the individual ETF shares to investors through the stock exchange. If the commodity price increases, the shares increase in value, and the investors gain; if the spot price drops, the shares fall in value, and investors lose. If the fund attracts more investors, the ETF would likely sell more Creation Units (or blocks of shares) in exchange for additional physical copper deliveries to support those shares; if investments in the fund decrease, the ETF would likely reduce its commodity holdings. The copper underlying the ETF may be purchased in cash markets or in commodity futures markets.

The S-1 filing also discloses that JPMorgan affiliates will play an active role in JPMXF, filling key administrative posts as well as acting as the purchaser of the initial Creation Units, as an Authorized Participant selling the initial shares to investors, as a market-maker encouraging the buying and selling of JPMXF shares, and as a physical dealer for the copper backing the Trust.[2]

JPMXF would be one of the few asset-backed ETFs on U.S. stock markets, and would be the first to rely on copper for its value. While the SEC already permits U.S. exchange sales of commodity-backed ETFs for gold, silver, platinum, and palladium, those precious metals and their markets are substantially different than the industrial market for physical copper. Prior to the establishment of commodity-backed ETFs for gold, silver, platinum, and palladium, these four precious metals were already treated as world currencies and commonly held for investment purposes. The supply and demand functions for these precious metals were already a combination of those who needed the metal for commercial or personal uses (for example, to

[2] Registration Statement, at p. 92.

make electronic components) and those who sought to hold it as passive asset (for example, to hedge against inflation).

Conversely, copper has not historically been held for investment purposes. It is, relative to precious metals, very expensive to store and difficult to transport.[3] Its supply and demand functions have traditionally been set according to commercial and personal uses only, and not as a store of value. Thus, for the first time, fabricators, manufacturers, and other industrial businesses who use copper will be forced to compete in the marketplace against the Trust and others seeking to hold the copper as a passive asset, thus changing the dynamic of copper's supply and demand functions.

For that reason, acquiring and holding copper for investment purposes will have a significantly greater impact on the physical copper market than ETFs holding palladium, platinum, silver, or gold had or have on their respective physical markets[4] and the broader economy[5]. In addition, because it appears to participate extensively in all aspects of the copper market, as detailed below, JPMorgan may be positioned and incentivized to effect or benefit from changes in the value of copper and participation in the ETF. Those interests may be at times in line with, and at times against, the investors in the ETF. For example JPMorgan's interests in negotiating high warehouse fees or shorting copper futures may contradict investors' interests in low administrative expenses and higher copper prices. Further, JPMorgan's other business interests may directly or indirectly benefit from copper price distortions, squeezes, corners, or other price manipulations, which the Trust may knowingly or unknowingly help them to achieve.

Subcommittee Investigations. The Permanent Subcommittee on Investigations, which I chair, has conducted several in-depth investigations into commodity markets, examining how excessive speculation can overwhelm normal supply and demand factors and increase prices at the expense of consumers and American businesses.

In 2006, for example, the Subcommittee released a report which found that billions of dollars in commodity index trading on the crude oil market had pushed up futures prices in 2006, caused a corresponding increase in cash prices, and was responsible for an estimated $20 out of the then $70 cost for a barrel of oil.[6] In 2007, the Subcommittee released a report showing how a single hedge fund named Amaranth made huge, speculative trades on the natural gas market using futures on a regulated futures exchange and swaps on an unregulated electronic energy exchange.[7] This trading activity pushed up futures prices and increased natural gas prices for both families and American businesses.

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[3] JPM XF Physical Copper Trust, Form S-1 Registration Statement, Amendment (1/17/2013) (hereinafter "Registration Statement"), at p. 40-41.

[4] See "Speculative Influences on Commodity Futures Prices," (2010), by Christopher Gilbert, http://unctad.org/en/docs/osgdp20101_en.pdf, at p.8

[5] See "The Growing Financialisation of Commodity Markets : Divergences between Index Investors and Money Managers," Journal of Development Studies, Vol. 48 , Issue 6, (2012), Jörg Mayer (UNCTAD), at p.752-753.

[6] "The Role of Market Speculation in Rising Oil and Gas Prices: A Need to Put the Cop Back on the Beat," U.S. Senate Permanent Subcommittee on Investigations Report, S.Prt. 109-65 (6/27/2006).

[7] "Excessive Speculation in the Natural Gas Market," U.S. Senate Permanent Subcommittee on Investigations, S. Hrg. 110-235, (6/25/2007).

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In 2011, the Subcommittee held a hearing on excessive speculation in commodity markets and compliance with the Dodd-Frank Act. We studied the rise of commodity-related Exchange Traded Products, commodity index funds, and the mutual fund industry.[9] Our investigation discovered that these funds had put billions of dollars in speculative money into U.S. commodities markets, causing increased price volatility. The investigation indentified the risk posed to the American economy from unstable prices for materials essential to industry, including copper.[10]

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Copper is used in vital industries such as the construction, electrical, and electronics industries. It is used to produce cable and wire used in power transmission and generation and in telecommunication, as well as for pipes used in plumbing and heating. Copper demand comes from fabricators and manufacturers who create these products, and copper is used as an end product by consumers throughout the world.

The majority of the copper produced annually is sold though long-term supply contracts. While such contracts specify the amount of copper to be delivered, price is typically not fixed until the time of delivery, exposing market participants to price uncertainty. Copper prices tend to experience wide and unpredictable fluctuations. Producers and consumers participate in

[8] "Excessive Speculation in the Wheat Market," U.S. Senate Permanent Subcommittee on Investigations, S. Hrg. 111-155, (7/21/2009).
[9] "Excessive Speculation and Compliance with the Dodd-Frank Act," before the U.S. Senate Permanent Subcommittee on Investigations, S. Hrg. 112-313, (11/3/2011).
[10] Id., Opening Statement of Senator Carl Levin.
[11] "Compliance with Tax Limits on Mutual Fund Commodity Speculation," Opening Statement of Senator Carl Levin before the U.S. Senate Permanent Subcommittee on Investigations, S. Hrg. 112-__, (1/26/2012).

copper futures exchanges to hedge against this price instability. Speculators also participate in these exchanges, buying price risk in exchange for potential profit.

The London Metal Exchange ("LME") is the largest and most influential copper futures exchange. "As a result of daily trading [of copper futures contracts on the LME], prices are 'discovered' and published by the LME."[12] The LME's prices are then used by producers and commercial end-users around world as the basis for the contract price for the physical purchase or sale of copper.[13] In addition to the base price, copper has an added "locational premium," the amount of which is based upon the supply and demand for copper and the storage and transportation expenses applicable to the location from which it is supplied.[14]

The LME is the main source of information about the physical demand for and supply and price of copper, because it has traditionally been a "market of last resort" for producers to sell excess stock and consumers to fill short-term needs for copper beyond the amount for which they have contracted.[15] Copper is sold on the LME through "warrants," or "bearer document[s] evidencing the right of the holder to possession of a specified lot of metal at a specified LME warehouse location."[16] Copper sold on the LME must be Grade A and of an "Acceptable Delivery Brand," a brand registered with the LME.[17]

B. S-1 Fails to Detail Trust's Impact on Copper Supply

There is ample evidence to suggest that if the JPMXF registration statement is declared effective and its shares are traded, it will disrupt the global supply of copper, which will affect copper prices.

The S-1 registration statement is incomplete, because it focuses on and provides information about the total size of the copper market, but ignores the much smaller amount of copper that is registered with exchanges. Since the prices for the broader market are largely determined by the prices on the exchanges, any reasonable analysis of the impact of JPMXF on market supplies and prices should also provide information related to the exchanges.

For example, although the Trust's registration statement states that, in 2008, there was an estimated 2.47 million metric tons of copper stocks in the global copper market, the registration statement and its related filings do not disclose that most of this copper was already allocated for delivery through long-term arrangements, and only 390,000 metric tons was registered with exchanges.[18] The copper registered with exchanges is part of the small percentage of global

[12] Registration Statement, at p. 43.
[13] Id.
[14] SEC Notice of Filing of Proposed Rule Change to List and Trade Shares of the JPM XF Physical Copper Trust; Release No. 34-66816; File No. SR-NYSEArca-2012-28, April 16,2012, at p. 13 (hereinafter "SEC Notice"); available at http://www.sec.gov/rules/sro/nysearcal20 I 2134-668 I 6.pdf. , at p. 25.
[15] Registration Statement, at p. 44.
[16] Id., at p. 44.
[17] Id., at p. 45.
[18] Id., at p. 20-21.

refined copper stocks that are "liquid stocks" available for immediate delivery.[19] For example, in 2011, while total global copper stocks were 3.515 million metric tons, liquid stocks available for immediate delivery totaled only 808,000 metric tons.[20] The JPMXF registration statement does not adequately disclose information about the limited supply of liquid copper stocks actually available for immediate delivery.

Moreover, of those "liquid stocks," only a small percentage of physical copper is truly available for purchase by third parties, including for placement in an ETF inventory. When one removes from the calculation of "liquid stocks" extra copper held by consumers and producers, stocks that are waiting to pass through customs into importing countries, and stocks on the Shanghai Futures Exchange which are unavailable outside of China, it appears that most of the remaining copper stocks available for immediate delivery must be purchased through the LME or the Commodity Exchange, Inc. ("COMEX"), the second largest metals exchange.[21] Because the ETF represents an even greater portion of the liquid stocks available for purchase by third parties, its impact on copper supplies and prices will be greater than indicated in the S-1. The JPMXF registration statement does not adequately disclose material information about the limited supply of liquid copper stocks actually available, not only for immediate delivery, but also for purchase and placement in an ETF.

Additionally, the S-1 filing has stated that it will accept and hold only Grade A copper of an "Acceptable Delivery Brand," exactly the type of copper available on the LME and COMEX.[22] Thus, even though the Trust states that it will accept copper supplies outside of those held through LME warrants,[23] the Trust's restrictions on the type of copper that it will accept makes it extremely likely that its copper will be acquired from LME or COMEX warehouses. Otherwise, copper supplies offered for delivery to the Trust would have to undergo expensive testing to establish their acceptability.

In August 2011, the LME reported it possessed approximately 464,000 metric tons of copper stocks, while the COMEX had about 81,000 short tons (or about 73,500 metric tons), producing a combined total of approximately 537,500 metric tons of copper stocks.[24] As discussed above, copper supply is relatively inelastic, so even with advance warning about an increase in the demand for copper, supply on the two exchanges is unlikely to significantly increase. According to the JPMXF's registration statement, it will seek to acquire 61,800 metric tons of copper to back its initial shares.[25] That amount represents over 11% of the total supply through the LME and COMEX exchanges. In addition, on February 25, 2013, the SEC approved

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[19] *Report on Refined Copper Inventories on the Global Market*, Table 3: "Refined Copper Balance Detail," Bloomsbury Minerals Economics Ltd., (10/12/ 2011) (hereinafter "BME Report"). Bloomsbury Minerals Economics is a specialized consultancy engaged in base metals market and price analysis, focusing in particular on copper.

[20] BME report, Table 3.

[21] Id. The Commodity Exchange, Inc., or COMEX, is a division of the New York Mercantile Exchange.

[22] Registration Statement, at p. 16. Although it does not use the term "Grade A," the COMEX uses a similar term, "High Grade," to describe the copper available on the COMEX. See http://www.astm.org/Standards/B115.htm, http://www.fcx.com/metals/copper_cathodes.htm.

[23] Registration Statement, at p. 46.

[24] LME Stock Report, J.P.Morgan, 9:07 AM, (8/10/2011).

[25] Registration Statement, at p. 21.

an NYSE ARCA rule to list another copper trust, iShares® Copper Trust, sponsored by BlackRock Asset Management International, Inc., which would also significantly increase the demand for physical copper.[26] BlackRock's copper ETF has indicated that it would seek to acquire 121,200 metric tons of copper to support its initial shares.[27] Together, these two ETFs would seek to hold approximately 183,000 metric tons, or 34% of all liquid stocks of copper.[28]

The Commission – indeed, U.S. investors and the U.S. business community -- have never before contemplated commodity-backed ETFs which may gain "legal" control of such a disproportionate share of an industrial metals market. Such ETFs are not only likely to disrupt global supplies and increase prices, but also raise legal issues related to whether and how the ETF's copper inventories and business activities may trigger concerns involving price distortions, squeezes, corners, and other manipulations in the copper market. Such activities also raise questions about the SEC's and CFTC's abilities to police for these potential violations due to the lack of transparency in the physical copper markets.

C. S-1 Fails to Detail How JPMXF Would Affect Price

Actions taken by JPMXF to remove such a large percentage of the available copper stocks from commodity markets to sit untouched in one or more warehouses for an indeterminate amount of time undoubtedly will affect and increase the price of copper. If the supply of copper available for immediate delivery drops by about 34%, it naturally follows that the price of copper will rise. As the price of copper in the market rises, demand for shares of the JPMXF will likely increase as well, leading it to issue more Creation Units requiring the removal of even more copper from the market and further decreasing the liquid supply. If allowed to occur, this market activity is likely to create a boom and bust cycle, as speculators enter and leave the market.

The impact on copper supply and price will be strongest in the United States, because it is likely that Authorized Participants will acquire needed copper supplies from LME and COMEX warehouses located in the United States due to lower costs. Of the countries where the Trust has "initially permitted warehouse locations,"[29] the U.S. warehouses have the lowest locational premia and, thus, the lowest initial acquisition costs.

As of August 2011, about 252,000 metric tons of copper were located in LME warehouses in the United States, and about 73,500 metric tons in COMEX warehouses located in the United States, for a total of about 325,500 metric tons of U.S. copper stocks available on the two exchanges.[30] The JPMXF's purchase of an initial 61,800 metric tons alone would remove about 19% of the U.S. supply of copper available for immediate delivery. If BlackRock's 121,200 metric tons are included, the two ETFs would remove over 56% of available U.S. copper stocks from the market. The S-1 filing is silent, however, about the extent to which acquiring copper supplies from U.S. warehouses would restrict U.S. and world copper supplies

[26] SEC Notice of Filing of Proposed Rule Change to List and Trade Shares of IShares Copper Trust; Release No. 34–67237; File No. SR–NYSEArca–2012–66, (6/22/2012).
[27] Jack Farchy, *JPMorgan copper ETF plan would 'wreck havoc,'* Financial Times, (5/24/2012).
[28] *See* BME report, Table 3; and Jack Farchy, *JPMorgan copper ETF plan would 'wreck havoc,'* Financial Times, (5/24/2012).
[29] SEC Notice, at p. 26.
[30] LME Stock Report, J.P.Morgan, 9:07 AM, (8/10/2011).

and affect prices, and what steps the Trust might take, if any, in response to U.S. price volatility, supply disruptions, or price distortions.

The S-1 generally recognizes that "the Trust, as it grows, may have an impact on supply and demand for copper that ultimately may affect the price of the shares in a manner unrelated to other factors affecting the global markets for copper."[31] Moreover, according to the JPMXF registration statement, "[p]urchasing activity in the copper market associated with the purchase of Creation Units from the Trust or selling activity following the redemption of Creation Units may affect the price of copper . . ."[32] While these general statements demonstrate that JPMorgan Chase is well aware of the impact that its copper ETF may have on copper supplies and prices, the S-1 fails to provide any specific information to investors about the next level of impacts.

For example, the S-1 fails to provide details regarding policies or actions the Trust or JPMorgan might take in response to copper price volatility which, in turn, would affect the value of the ETF investments. Because the S-1says it has "no formal procedures to resolve potential conflicts of interest," it indicates that either the Trust has no policy or it may have inadequate procedures to protect investors in the event that JPMorgan affiliates trade against the Trust.

In addition, the S-1 does not identify, discuss, or present actions that could be taken to address the legal issues that might arise if the ETF itself is seen as fostering price distortions, squeezes, corners, or other price manipulations in the copper market. Nor does the S-1 detail what policies and procedures JPMorgan would follow to ensure that its other trading and business interests are not impermissibly conflicted with those invested in JPMXF. For example JPMorgan controls a wholly owned subsidiary that warehouses copper and could create a short term squeeze by slowing release of copper from the warehouse. That warehouse subsidiary also control rates charged for storage and could drive copper prices up by driving up the embedded cost of storage.

As currently configured, the Trust contains no provisions to prevent high investor demand from causing an increase in copper prices or, alternatively, a quick drop in demand from driving down copper prices. The risk of a bubble in the copper market creates a corresponding risk that the bubble will eventually burst. If that happens, investors may dump thousands of metric tons of copper back onto the market, swamping the market and depressing the price, impacting not only copper-reliant industries around the world, but also possibly producing large gains for any parties shorting the copper market. Again, the S-1 fails to adequately disclose or discuss the extent of this risk and its impact on the value of JPMXF.

D. S-1 Fails to Detail JPMorgan's Expansive Role in Copper Markets

JPMorgan's public filings, as well as press reports about its commodities activities as described above, raise questions about the firm's concentration of economic power in the commodity markets, generally, and more specifically in the copper markets, the extent of which is not adequately disclosed in the S-1.

[31] Registration Statement, at p. 20.
[32] Registration Statement, at p. 28.

JPMorgan's public filings and public reports suggest that it controls and owns affiliate entities in nearly all aspects of the commodities business, providing it vertical integration in financing, transportation, storage, and trading for its customers and proprietary positions in the physical and financial markets. It is one of the largest derivatives dealers in the world and is a major trader in commodities markets.[33] Its affiliates appear to be active participants in virtually all aspects of the copper market, some of which also plan to provide services to JPMXF. The S-1's disclosures regarding the role of JPMorgan's affiliates with respect to JPMXF, the possible and actual conflicts of interest that may arise, and how investors may be affected are incomplete on their face.

According to JPMXF's most recent S-1 filing, JP Morgan affiliate entities will play an extensive role in supporting the operations of JPMXF, including administering the Trust, warehousing its copper inventory, acquiring initial and subsequent copper supplies to support the Trust, and marketing and selling the Trust shares. The S-1 filing states:

> "The Trust, the Sponsor, the Administrative Agent, the Warehouse-keeper and J.P. Morgan Securities LLC, the initial Authorized Participant, are all affiliates of JPMorgan Chase & Co. In addition, the Sponsor will appoint an affiliate of JPMorgan Chase & Co. to act as marketing agent for the Trust. It is currently expected that a JPMorgan Entity will purchase the Initial Creation Units of the Trust and continue to act as an Authorized Participant for the Trust after the issuance and sale of the Initial Creation Units and act as market-maker for the shares or act as a physical dealer of copper. JPMorgan Entities may also buy or sell shares, on their own behalf, as part of a hedge or on behalf of a client. In addition, certain JPMorgan Entities are currently active participants in the copper market and other commodities markets, including in the physical markets for commodities, the futures markets (on multiple commodity exchanges) and the OTC markets, including the trading of commodity swaps, options and other derivatives."[34]

The S-1 filing also discloses that "A **significant** portion of trading in the physical copper market is currently conducted by such JPMorgan Entities."[35] (Emphasis added.)

The S-1 does not go beyond this general disclosure, however, to provide investors with key information about the so-called "JPMorgan Entities," failing even to provide a comprehensive list of those entities and the services each may perform for JPMXF. While the S-1 filing discloses, for example, that the Trust Sponsor and Warehouse Agent are owned by JPMorgan's wholly-owned subsidiary, J.P. Morgan Ventures Energy Corporation, it does not disclose the extent to which J.P. Morgan Ventures Energy Corporation subsidiaries and affiliates appear to be active in copper markets.[36] Those subsidiaries and affiliates include J.P. Morgan

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[33] See, e.g., "OCC's Quarterly Report on Bank Trading and Derivatives Activity Third Quarter 2012," Tables 1, 2, 5, Office of Comptroller of Currency, http://www.occ.gov/topics/capital-markets/financial-markets/trading/derivatives/dq312.pdf.
[34] Registration Statement, at p. 92.
[35] Registration Statement, at p. 93.
[36] JPMorgan Chase & Co., Form 10-K (2011), Exhibit 21.

China Commodities Corporation, J.P. Morgan Commodities Canada Corporation, J.P. Morgan Commodities Sarl, J.P. Morgan Metals & Concentrates LLC, J.P. Morgan Metals Group Limited, and J.P. Morgan Metals Limited.[37] None of them are mentioned in the S-1, and the roles which they may play in JPMXF are not disclosed.

The S-1 does provide more specific information about one JPMorgan affiliate, The Henry Bath Group, which has been appointed warehouse-keeper for the copper of JPMXF. The S-1 states: "The Henry Bath Group is a warehousing services provider specializing in the storage and shipping of exchange-traded metals and soft commodities around the world. The Henry Bath Group operates a global platform of exchange-approved storage warehouses for holding, making and taking delivery of physical commodity products."[38] "The Henry Bath Group has over 200 years of experience in storage and handling of metals traded on the LME (London Metals Exchange)."[39]

The S-1 filing also generally states: "Banks provide a variety of services to the copper market and its participants, thereby facilitating interactions between other parties. Services provided by the banking community include traditional banking products as well as mine financing (both secured and unsecured), physical copper purchases and sales, hedging and risk management and inventory management for industrial users and consumers."[40]

The S-1 filing does not, however, disclose any policies, procedures, or practices for pricing the services to be provided by JPMorgan affiliates and ensuring those services are provided in a reasonable way to benefit the Trust and its investors. The filing does not disclose, for example, whether JPMXF will allow JPMorgan affiliates to charge it the same price as each affiliate charges other JPMorgan affiliates, the lowest price charged by the affiliate to any third party client, the highest price charged to any client, or some other price, but is instead silent. The only related disclosure is that the firm "has not established formal procedures," but then fails to describe its informal or actual procedures, even though pricing of required services will be central to the profitability of the ETF. Recent history has shown that a financial institution's affiliates, when involved with administering a complex financial instrument sold to investors, can administer their duties in ways that advantage their parent corporation at the expense of investors.[41] Adequate information about which affiliates will be providing which services to JPMXF using what pricing and administration principles is essential to investors making informed decisions about the returns on a JPMXF investment.

Moreover, based on publicly available information beyond what is contained in the S-1, JP Morgan appears to be a major merchant in physical commodities and plays a dominant role in

[37] Id.
[38] Registration Statement, at 3.
[39] Id. at 3.
[40] Id. at 34.
[41] See, e.g., "Wall Street and the Financial Crisis: Anatomy of a Financial Collapse," U.S. Senate Permanent Subcommittee on Investigation, S. Hrg. 112-675, Volume 5, (4/13/2011), at 687-703. That Subcommittee investigation found that a Goldman Sachs affiliate had acted as the Liquidation Agent for a financial instrument in which the investors held the long side, but another Goldman affiliate secretly held the short side. The Liquidation Agent then delayed selling certain assets that were losing value because, although the reduced value damaged the long investors, it benefited the short investment held by another Goldman affiliate. See also id., 703-718 (discussing how a Goldman affiliate handled default swap collateral purchased in connection with certain financial instruments).

global commodity markets. JPMorgan filings and public reports suggest that it controls and owns affiliate entities in nearly all aspects of the commodities business, providing it vertical integration in financing, transportation, storage, and trading for its customers and proprietary positions in the physical and financial markets. Although the public information is limited about JPMorgan copper related entities, in 2008, the firm acquired the physical commodity trading assets of failing Bear Stearns. In 2010, JPMorgan bought the global commodities business of Royal Bank of Scotland. Both of these businesses were major players in the commodity markets. In 2012, JPMorgan reported to the Federal Reserve that its gross fair value of physical commodities inventory was $17.2 billion respectively.[42]

In late 2011, JPMorgan bought a stake in the London Metals Exchange (LME) from MF Global and is now the exchange's largest shareholder.[43] According to the LME's website, "The London Metal Exchange is the world centre for industrial metals trading and price-risk management. More than 80% of global non-ferrous business is conducted here and the prices discovered on our three trading platforms are used as the global benchmark." The LME's prices "are used the world over by industrial and financial participants for referencing, hedging, physical settlement, contract negotiations, margining and portfolio evaluations .... The prices discovered on the LME are used the world over as the reference price for physical negotiations."[44]

Press reports also indicate that JPMorgan has been buying up copper since 2010, in anticipation of its ETF launch.[45] In April 2012, the firm reportedly held 30-40% of total copper positions on the LME.[46] This may already have artificially inflated the price of copper, which is up more than 15% since 2010.

Nevertheless, it is not clear whether JPMorgan intends to use its copper supplies to provide an inexpensive source or to buy copper ahead of JPMXF investors at a lower price, profiting when it resells the copper to the Trust at higher prices to the investors in JPMXF, an obvious conflict of interest which is unaddressed by the S-1.

The general disclosures in the S-1 filing about JPMorgan's broad, commodity activities also does not adequately address the firm's ability to remove from the market and store in its own warehouses for indeterminate periods of time vast quantities of this critically important metal, potentially distorting not only the copper trading and financial markets, but also JPMXF's expenses and financial viability. The S-1 does not sufficiently describe the firm's dominant position as a major dealer and market-maker in the physical and financial copper markets, nor

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[42] JP Morgan, Form FR Y-9C, (12/31/2011), Schedule HC-D "Trading Assets and Liabilities," Item M.9.a.(2), and JP Morgan, FR Y-9C, (3/31/2012), Schedule HC-D "Trading Assets and Liabilities," Item M.9.a.(2). Form FR Y-9C is a quarterly report filed with the Federal Reserve Board by bank holding companies with total consolidated assets of $500 million or more. 12 U.S.C. § 1844; 12 C.F.R. § 225.5(b).

[43] Mark Scott & Michael J. De La Merced, *JPMorgan Said to Buy MF Global Stake in London Metal Exchange*, N. Y. TIMES, (11/23/2011).

[44] http://www.lme.com/pricing-and-data/pricing/

[45] Louise Armitstead & Rowena Mason, *JPMorgan as mystery trader that bought £1-bn-worth of copper on LME*, TELEGRAPH, (12/04/2010).

[46] *CESCO week: Glencore,JPMorgan hold dominant copper position as backflares – sources*, ETALBULLETIN.COM, (4/18/2012).

does it adequately disclose copper positions that may be held by JP Morgan, its affiliates, sponsored funds, and its customers. Because JP Morgan is so involved in every segment of the copper markets, its concentration in copper markets may be great and it may be in a position to exert improper influence over its price and take advantage of JPMXF investors. Greater disclosure is called for so an investor may weigh the true risk of the firm's ability to self deal through its affiliates.

E. S-1 Fails to Address Pervasive Conflicts of Interest

Issues related to how the Trust would handle copper acquisitions, price volatility, warehousing, service costs, and legal issues involving price manipulation, squeezes, corners, and price distortions are further complicated by pervasive real and potential conflicts of interest arising from the active involvement of JPMorgan and its affiliates in the copper market.

Although the S-1 discloses that JPMorgan and its related entities "may" have a conflict of interest between the bank's own interests and interests of the investors in the trust, the filing does not adequately describe the extent of such conflicts or acknowledge that those conflicts do, rather than "may," exist.[47] Because of the limited disclosure in the S-1, the nature and extent of JPMorgan's involvement in copper activities remains incomplete. The S-1 filing's description of JPMorgan's role in copper is at best an outline of its activities. The details of each JPMorgan entity's role in copper mining, mine financing, refining, transportation, storage, delivery, sales, marketing and trading activities, including the extent of its proprietary positions in the physical and financial markets, needs to be disclosed, because such information is material to investors so they may evaluate the likelihood of JPMorgan's incentive to trade against them.

The use of "may" is also inadequate if JPMorgan's conflicts already exist. The S-1 states: "[t]hese affiliations and trading activities may present a conflict between the interests of shareholders and the Trust, on the one hand, and the interests of JPMorgan Entities, on the other." Unless it is able to establish that the conflict does not exist at this time, the use of "may" is misleading.[48] There is ample evidence in the public domain that actual conflicts exist which require JPMXF to make greater disclosures. As noted above, in April 2012, the firm reportedly held 30-40% of total copper positions on the LME. If true, this position and any other copper positions held by the firm through its affiliates and sponsored funds must be disclosed in its registration statement. In addition, JPMorgan reported to the Federal Reserve its commodities inventory was over $17 billion in 2012. To the extent that inventory includes physical copper, investors are entitled to know this information to evaluate the magnitude of this actual conflict.

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[47] Registration Statement, at p. 4, 92.

[48] A federal court has held, for example, that disclosing a potential adverse interest, when a known adverse interest already exists, can constitute a material misstatement to investors. See, e.g., SEC v. Czuczko, Case No. CV06-4792 (USDC CD Calif.), Order Granting Plaintiff's Unopposed Motion for Summary Judgment (Dec. 5, 2007) (finding defendant made a material misstatement to potential investors when he disclosed that officers, directors, employees and members of their families "may" trade in the stocks recommended on his website, without disclosing that he, his father, and business partner were trading in those stocks and had an interest in them). See also In re Arleen Hughes, Securities Exchange Act Rel. No. 4048 (Feb. 1948) (holding a broker-dealer, who is also a registered investment adviser, had to disclose the "nature and extent" of its adverse interest); In re Edward D. Jones & Co., L.P., Exchange Act Rel. No. 50910 (Dec. 22, 2004) (settled order), at 21 (disclosure inadequate for failing to disclose full nature and extent of the broker-dealer's conflict of interest).

If its copper holdings are located in warehouses under the control of its affiliates, those holdings must also be disclosed -- because JPMorgan would be in a position to delay deliveries and impact price.

In addition, in the S-1, JPMXF disclosed "A **significant** portion of trading in the physical copper market is currently conducted by such JPMorgan Entities." (Emphasis added.) That general disclosure is incomplete and inadequate, because it does not explain what is meant by "significant," does not detail which JPMorgan Entities engage in copper trading, and, in particular, does not specify the extent to which JPMorgan Entities hold long versus short positions in the physical, futures, swaps, and options copper markets.

Investors are entitled to information about the extent and nature of these trading activities and positions, so that investors may evaluate the extent of JPMorgan's incentives to trade against them, to favor higher or lower copper prices, increase price volatility, the issue additional Creation Units to remove more copper from the market, or redeem of existing Creation Units to release more copper into the market. Recent history is replete with instances of financial institutions using their affiliates to sell financial products to their clients, only to take an opposing position in one or more financial markets and trade against their clients.[49] Studies have also shown how commodity speculators can affect copper prices.[50] To ensure investors understand the conflicts of interest, in appearance and reality, that will affect how JPMorgan and its affiliates will trade with respect to JPMXF, the JPMXF registration statement must provide full disclosure of the trading activity and the long and short copper positions held by JPMorgan Entities, in particular those entities contemplating involvement in the operation of the ETF.

In addition, investors must understand the degree of JPMorgan's vertical integration in the copper markets. The physical commodities markets are opaque, and public information on holdings in each layer of the vertical chain is limited. At a minimum, the S-1 should disclose the extent to which JPMorgan Entities retain ownership, leasing, or collateral interests in copper mines, refining facilities, transportation facilities (such as railroad or trucking facilities dedicated to copper), supply contracts, and storage facilities. Each of those activities could have a direct impact on the ETF's costs and profitability – how much it will cost JPMXF to acquire copper supplies, refine copper into Grade A condition, transport it from the refinery to a warehouse, store it, and, if necessary, sell it.

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[49] See, e.g., "Wall Street and the Financial Crisis: Anatomy of a Financial Collapse," U.S. Senate Permanent Subcommittee on Investigations, S. Hrg. 112-675, Volume 5, (4/13/2011), at 661-662. Among other examples, the Subcommittee investigation determined that, while Goldman Sachs was actively marketing Timberwolf securities to investors at inflated prices, its own trading desk was shorting the underlying Timberwolf assets. Not only were investors not informed of those aggressive shorts, but Goldman may have also benefitted from the decision to market Timberwolf at inflated values, because it may have allowed its trading desk to buy shorts at lower prices than would have been available had the Timberwolf securities been marked down to accurate prices.

[50] See "Speculative Influences on Commodity Futures Prices," (2010), by Christopher Gilbert, http://unctad.org/en/docs/osgdp20101_en.pdf, at p.8; "The Growing Financialisation of Commodity Markets : Divergences between Index Investors and Money Managers," Journal of Development Studies, Vol. 48 , Issue 6, (2012), Jörg Mayer (UNCTAD), at p.752-753.

In addition, by participating directly in virtually every aspect of the physical copper market, JPMorgan and its affiliates will have an unfair informational advantage regarding the ETF's positions and could easily manipulate their services or trading to take advantage of JPMXF investors. To make an informed investment decision, investors need to understand the incentives applicable to JPMorgan Entities, and what policies, procedures, and practices will be used to counteract the apparent, pervasive conflicts of interest. Currently, the S-1's disclosures are wholly inadequate to enable investors to perform that conflict of interest analysis.

JPMXF acknowledges in the S-1 that although it "attempts to monitor these conflicts, it is extremely difficult, if not impossible, … to ensure that these conflicts do not, in fact, result in adverse consequences to the Trust."[51] Presumably, JPMXF describes monitoring the conflicts of interest as "extremely difficult," because of the lack of transparency regarding the activities of all the JPMorgan Entities involved in the copper business. If JPMXF finds it impossible to monitor conflicts, it creates an even greater need for disclosure of all known material facts that exist relating to JPMorgan's global reach and dominant position in commodities prior to its registration statement being declared effective.

F. S-1 Does Not Detail Indemnification of Affiliated Entities.

One shareholder right that has been severely curtailed in the JPMXF filing is the right to sue. Specifically, by providing essentially unlimited indemnification of all JPMorgan affiliates providing actual services to the Trust, the filing appears to attempt to cut off any right of action against those parties.[52] The indemnification requires the Trust to defend any and all of the "bank affiliated entities" with investor funds, with no limits on the expenditure amounts, even in the case of negligent performance. At the same time, the S-1 does not provide a complete list of the affiliated entities given such sweeping indemnification. The result is that investors are apparently limited to pursuing the sponsoring entity, a shell company, in the event of misperformance, yet even there, the S-1 fails to disclose the extent to which that shell company will be capitalized or insured to cover possible losses or damages.[53] At a minimum, investors should be fully informed of all of the bank affiliated entities that are being indemnified, receive notice that even affiliates providing negligent services are indemnified with investor funds, and obtain a clear explanation of the extent to which the Trust will acquire insurance to pay litigation costs, losses or damages in connection with investor lawsuits, without recourse to investor funds.

G. Additional Disclosures Needed in JPMXF S-1

The JPMXF S-1 filed on January 17, 2013 is incomplete on its face and should not be declared effective until it provides meaningful disclosures of at least the following matters which provide critical information for investors to make an informed evaluation of the JPMXF investment:

(1) the nature and extent of the role and business activities of JPMorgan and its affiliates in the physical copper market, including the role played by specified

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[51] Registration Statement, at 92.
[52] Id. at 83.
[53] Id.

JPMorgan affiliates or entities in the mining, financing, refining, transport, storage, or trading of physical copper;

(2) the Grade A and non-Grade A physical copper inventories held by JPMorgan and its affiliates each month during the six-month period prior to JPMXF's launch, including whether those inventories were held under LME or COMEX warrants, whether they were held at warehouses under the control of JPMorgan or its affiliate, and how those copper inventories compared to total world copper inventories, liquid stocks available for immediate delivery, and liquid stocks available for immediate purchase;

(3) material trading positions held by or for JPMorgan and its affiliates in the futures, swaps, and options copper markets each month during the six-month period prior to JPMXF's launch, detailing long and short positions without netting;

(4) an enhanced discussion of the Trust's potential impact on the price and volatility of the copper market, including enhanced disclosures of the risks to investors arising from the Trust potentially constituting such a large portion of the exchange market;

(5) a description of JPMXF policies, procedures, and practices to identify and address conflicts of interests between JPMorgan and investors in JPMXF, including the determinations of whether to issue new interests in the Trust;

(6) a comprehensive list of each JPMorgan affiliate or entity expected to provide services to JPMXF, together with, for each such entity, the services to be provided;

(7) a description of JPMXF policies, procedures, and practices to determine how services provided by a JPMorgan affiliate or entity will be priced, and whether those services are being provided in ways that disadvantage JPMXF investors;

(8) a comprehensive list of each JPMorgan affiliate or entity that will be indemnified by the Trust in connection with providing services to the Trust; and

(9) the extent to which the Trust will obtain insurance to respond to investor lawsuits and pay any losses or damages, without using investor funds.

Thank you for the opportunity to provide comments on the JPMXF filing to increase investor safeguards.

Sincerely,

Carl Levin

Carl Levin
Chairman
Permanent Subcommittee on Investigations

VANDENBERG & FELIU
LLP

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July 18, 2012

<u>**VIA EMAIL**</u>

Elizabeth M. Murphy
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549-1090

Re: **<u>File No. SR-NYSE Arca-2-12-66</u>**

Dear Ms. Murphy:

This firm represents represent Southwire Company, Encore Wire Corporation, Luvata, and AmRod, as well as RK Capital LLC. Southwire is based in Georgia, Encore in Texas, Amrod in New Jersey, and Luvata has plants in Ohio, Connecticut, Missouri, Kentucky, California, Wisconsin, Texas and Florida. Together these companies comprise about 50% of the copper fabricating capacity of the United States. RK is an international copper merchant with offices in London and New York. We oppose the rule-change.

This is the second of two rule-changes that NYSE is proposing to list and trade shares of a physical copper-backed exchange traded fund or "ETF." The first proposed rule change, on behalf of JPM XF Physical Copper Trust, calls for the initial removal from LME and Comex warehouses of as much a 61,800 metric tons of physical copper; the second proposed rule change, on behalf of BlackRock's iShares, calls for the initial removal from these same warehouses of as much 121,200 metric tons of physical copper, for a total of 183,000 metric tons.

Almost all of the refined copper produced annually worldwide is subject to long-term delivery contracts with copper fabricating companies. By contrast, the copper in the LME and Comex warehouses is the only refined copper generally available for immediate delivery.

At present, there is only about 240,000 metric tons of copper in LME warehouses worldwide, and an additional 60,000 metric tons of copper in Comex warehouses in the United States, or about 290,000 in total. If successful, the listing and trading of shares for these two funds would result in removing from the market as much as 63% of the copper from these warehouses.

As shown below, the removal of so much copper from these warehouses would disrupt the copper market, particularly in the United States, in numerous material ways. Indeed,

Permanent Subcommittee on Investigations
EXHIBIT #87

the risks associated with the removal of so much copper from the market could have potentially devastating effects not just on potential investors in the shares, which should be of concern to the SEC, but also on existing and future investors in industries that depend on copper for their primary feedstock – because it is these companies that will face artificially inflated prices, shortages of supply and increased price volatility if the listing and sale of these shares is successful. No ETF backed by a base metal used exclusively for industrial purposes has ever before been listed and sold on any nationally recognized exchange in the United States.

Significantly, even though the registration statements for both the JPM and BlackRock ETFs were first proposed in October 2010, because of the huge risks involved, they have had to be amended numerous times and yet, the SEC's Corporation Finance Division, which has been waiting for nearly a year for additional amendments from both applicants, has still not allowed either registration statement to become effective.

Indeed, BlackRock's most recent draft registration statement was filed on September 2, 2011 – nearly a year ago. Thus, the Exchange's latest proposed change in the rules – to allow shares of BlockRock's copper ETF to be listed and sold – is therefore based on a draft registration statement that is nearly a year old and whose contents will almost certainly be subject to change.

It is against that background that the Exchange believes the SEC should nevertheless now allow the Exchange to be permitted to list and sell shares in both BlackRock's and JPM's copper ETFs. We respectfully disagree.

First, there should be no doubt that the purpose of the BlackRock ETF, like the JPM ETF, is to remove enough copper from the market for copper available for immediate delivery, i.e., copper from the LME and Comex warehouses, to cause an artificial rise in price. Thus, the only copper that can qualify for delivery to the BlackRock Trust is copper that meets the LME specifications for copper on warrant. The most obvious and freely available source of such copper is copper on warrant in LME warehouses today; Comex copper will also qualify. All other copper that might qualify is either (i) part of the supply chain of copper that is subject to long-term contracts between producers and consumers and therefore not available to be acquired, or (ii) copper held in bonded warehouses in China and destined for the Chinese market; only on rare occasions are small amounts of such copper ever delivered to LME warehouses in Asia; or (iii) copper held by the governments of China and South Korea, respectively, for strategic reserves, and also not available for purchase. See Report on Refined Copper Inventories on the Global Market, Table 3: "Refined Copper Balance Detail," Bloomsbury Minerals Economics Ltd., October 12, 2011. Available at Exhibit A of Submitted Comment from Robert B. Bernstein, Vandenberg & Feliu LLC, July 13, 2012, p. 15. Bloomsbury Minerals Economics is a specialized consultancy engaged in base metals market and price analysis, focusing in particular on copper.

BlackRock's draft registration statement tries to convey the false impression that because there is copper tonnage outside of LME and Comex warehouses, such copper must therefore be available for its ETF to acquire. Thus, BlackRock states that in 2010, refined copper production totaled 19,075,000 tonnes, "more than 33 times greater than the 568,057 tonnes of combined copper inventories held in warehouses registered with the LME, the

Shanghai Futures Exchange and the Comex division of the CME Group," that "at the end of 2010 world stocks of refined copper totaled 1,289,000 tonnes" and that "there are at least an additional 1.5 million tonnes of refined copper in global inventories based on reported Chinese copper usage and trade flow data statistics for China." BlackRock draft prospectus, dated September 2, 2011, at 10-11.

However, BlackRock has no evidence to suggest that any of this non-exchange inventory is available for delivery for its ETF. Indeed, all BlackRock states in this regard is that "[m]etal stored in the area of the warehouse approved by the exchange that is not registered with the exchange [i.e., not on warrant] is not reported in exchange inventory data," that "there are no comprehensive statistics or data on physical copper stockpiles held by all commercial and non-commercial market participants," and that "the quantity of copper available in the physical market that meets LME specifications for "good delivery" cannot be calculated because detailed reporting on copper specifications is not typical for the industry." Id. at 10, 22. In short, BlackRock appears to be playing fast and loose in not explaining that there in fact is no copper available for "good delivery" to its ETF other than copper in the LME and Comex warehouses, which may be one reason why the SEC's Corporate Finance division has not allowed BlackRock's registration statement, upon which the Exchange's rulemaking is based, to become effective without further amendment.

What is more, BlackRock's draft registration statement makes clear that by depleting warehouse stocks, they (and others marketing similar ETF products) will be able to artificially raise prices for copper and thus of the ETF shares themselves. First, BlackRock states that no matter how much copper stock may be available outside of the exchange warehouses, it is "inventory levels at exchange warehouses [which] tend [] to reflect market conditions." BlackRock then states that "[a]n increase in the demand for copper, driven by the success of the trust or similar investment vehicles, could result in increases in the price of copper that are otherwise unrelated to other factors affecting the global copper markets." Id. at 10.

BlackRock further explains that in order for the investment to be successful, they will have to continue to be able to remove enough copper from the market in order to keep raising prices high enough to cover the monthly costs of storing the copper. Thus, BlackRock states:

> "If all of the 12,120,000 Shares registered in this offering had been issued on the day the initial Shares were issued to the Initial Purchaser at a per-Share consideration of 10 kilograms of copper, a total of 121,200 tonnes would have been deposited into the trust at that time. . . . The amount of copper represented by the Shares will decrease over the life of the trust due to the sales necessary to pay trust expenses. Without increases in the price of copper sufficient to compensate for that decrease, the price of the Shares will also decline and you will lose money on your investment in the Shares. However, because there is no limit to the number of Shares that the trust can issue, a very enthusiastic reception of the Shares by the market, or the proliferation of similar investment vehicles that issue shares backed by physical copper, would result in purchases of copper for deposit into the trust or such similar investment vehicles that could be large enough to

result in an increase in the price of physical copper. If that were the case, the price of the Shares would be expected to reflect that increase."

Id. at 10. (emphasis added).

However, as with all artificially created squeezes, there comes a time when the boom will bust, and BlackRock admits that may occur here as well. Thus, BlackRock states:

"It is impossible to predict whether, or at what point, the demand for copper-backed investment instruments like the Shares would eventually stabilize and, if it does, whether the price of copper would remain stable or return to historical levels. An investor purchasing Shares at a time when they reflect a temporarily inflated price of copper will sustain losses upon the sale of such Shares after the effect of such events causing such inflated prices has ceased and the price of copper has returned to a deflated level."

Id.

Given these disclosures, it should be clear that the listing and trading of shares in physical copper backed investment instruments like that being proposed by BlackRock and JPM – and the consequent drawdown and removal from the market of most of the copper in LME and Comex warehouses -- risk endangering the price discovery functions of the LME and Comex. In addition, industries which rely on copper as a feedstock will face artificially high prices, price volatility when prices collapse, and a risk that supplies from the market for copper available for immediate delivery may not be available when most needed to satisfy consumer demand.

What is more, these effects are, as a practical matter, most likely to be felt most directly in the United States. The reason is that, as with the JPM offering, the copper that is cheapest to acquire will most likely be copper on warrant in United States warehouses. This is because, for the most part, the cheapest location premiums for copper on warrant is from copper in LME warehouses in the United States. The "Authorized Participants," like Goldman Sachs, who will be authorized to acquire copper for the BlackRock Trust will want to acquire copper at the cheapest location premiums possible in order for the price of ETF shares to be issued in exchange for the copper to mirror as closely as possible, the price per metric ton of copper on the LME. Thus, depletion of copper from the LME warehouses will most likely be felt the hardest in the United States and, once copper from the LME warehouses is depleted, copper from the Comex warehouses will be depleted as well, as copper there is moved to LME warehouses in order to take advantage of higher prices.

The principal victims will in the first instance be United States consumers who typically rely on supplies of copper for immediate delivery to augment their long-term supply. These fabricators will not only be forced to pay higher prices, and incur the risk of price volatility once prices collapse, but there may be periods of time when those who can least afford it will be unable to get supply.

Most U.S. copper fabricators enter into long-term supply contracts for about 85% of their annual requirements. In that way, they can protect against the risk of reductions in demand for product without having to incur the added expense of storing inventory they cannot use. Thus, U.S. copper fabricators depend on the market for copper available for immediate delivery, which is to say, they depend on there being copper available in the LME and Comex warehouses. But the physical copper backed instruments that BlackRock and JPM wish to list and trade on the Exchange will substantially reduce the supply of copper available for immediate delivery in the United States, and with that comes the risk that some fabricators will not be able to acquire the supply they need to meet demand – particularly if the housing market were to recover and demand were to spike.

As supplies of copper in the United States get tighter as a result of the listing and trading of shares of physical copper backed investment instruments such as these, the chief beneficiary will likely be competitors in China. China consumes 40% of the world's copper, which makes it the world's largest copper consumer. Because the copper being taken off market will come mainly from the United States, Chinese manufacturers will have the copper feedstock on hand to produce copper rod, tubing and wire, while at least some of their American counterparts will not.

And to make matters even worse, it now appears that the overall market for copper globally, which has been in deficit for the past several years, will continue to be in deficit, that is, annual global demand will exceed annual global supply. See e.g., Bloomberg, "Looming Copper Surplus Contracting as Mining Fails: Commodities," July 18, 2012. Thus, Bloomberg reported today that "[a]nalysts are slashing predictions for the first copper glut in four years as producers from Chile to Indonesia contend with aging mines and strikes at a time of record demand." A copy of this story is enclosed.

In short, the proposed ETF is unlike any other metal ETF currently listed on the Exchange and would allow speculators in the guise of purchasers of shares to create a squeeze on the market. The proposed rule change is therefore inconsistent with Section 6(b)(5) of the Securities Exchange Act of 1934, which requires that rules be designed to prevent manipulative acts and protect investors and the public interest.

Finally, we agree with the comments of Senator Levin, dated July 16, 2012, in opposition to the Exchange's proposal to list and trade shares of the JPM XF Physical Copper Trust. Those comments apply with equal force here. Likewise, we incorporate by reference the comments and attachments which this firm filed on behalf of our clients also in opposition to the Exchange's proposal concerning the JPM Trust.

Sincerely,

Robert B. Bernstein

From: Jennifer.Giordano@lw.com [mailto:Jennifer.Giordano@lw.com]
Sent: Monday, November 10, 2014 3:39 PM
To: Sean.Berkowitz@lw.com; Gellasch, Tyler (HSGAC)
Cc: Lueptow, Michael (HSGAC)
Subject: RE: Final Questions

Ty –

In response to your second question below, we assume that you are referring to the LME's public "Warrant Banding Report". Published daily, the warrant banding report shows the number of market participants with a concentration of LME warrants. The report from December 15, 2010 is set forth below.

Please note that the report is segmented by metal and displayed in five bands: 30 - <40%, 40 - <50%, 50 - <80%, 80 - <90%, 90 - 100%. Figures are reported two business days in arrears. The holdings indicated in this table may no longer be held. Whenever a participant's holdings of LME warrants is 30% or more of the total LME warrants it appears in the respective band below.

Report Date COB 15/12/10

Figure	AH	CA	ZS	NI	PB	SN	AA	NA
30 - <40%	1	0	0	0	0	0	0	0
40 - <50%	0	0	0	0	0	1	0	0
50 - <80%	0	1	1	1	0	0	0	1
80 - <90%	0	0	0	0	0	0	1	0
90 - 100%	0	0	0	0	0	0	0	0
Unreported Warrants(%)	0	0	0.3	0	0.5	0	0	0

Key	AH	Primary Aluminium
	CA	Copper
	ZS	Zinc
	NI	Nickel
	PB	Lead
	SN	Tin
	AA	Aluminium Alloy
	NA	NASAAC

With respect to your third question, the LME submits the following clarifications, which we believe makes the statement more accurate and complete:

Permanent Subcommittee on Investigations
EXHIBIT #88

CONFIDENTIAL - Methodology for Calculating Capacity Payments for Purposes of 5% Limit

Background

The letter (the "Letter") from the Board of Governors of the Federal Reserve System (the "Board") to JPMorgan Chase & Co. ("JPM") dated June 30, 2010 approved energy tolling as a complementary activity for JPM. JPM committed to include the present value of all capacity payments to be made by it in connection with energy tolling agreements in calculating its compliance with the limit of 5% of tier 1 capital on the aggregate market value of the physical commodities that it and its subsidiaries hold. The Letter stated that JPM committed to conduct energy tolling activities in accordance with the restrictions, definitions and conditions previously imposed by the Board on the conduct of those activities. In its approval to The Royal Bank of Scotland Group plc, The Royal Bank of Scotland Group plc, 94 Federal Reserve Bulletin C60 (2008), the Board (the "RBS Order"), the Board defined "capacity payments" as "a fixed periodic payment that compensates the power plant owner for its fixed costs." The other components of the fixed periodic payment, including those which cover variable operating and maintaining expense and profit to the plant owner, are not within the definition of "capacity payment" and do not need to be included in the computation. JPM had been including the entire fixed payment that it makes in its 5% limit calculation through October 2010. The methodology below describes how JPM calculated the "fixed cost" payment for the November 2010 limit calculation and going forward.

Methodology

The following procedure describes how JPM determined the value of the portion of the toll demand payments attributable to fixed operating costs in order to comply with the Letter.

A. First, we note that the financial information of the power plants is non-public, and we normally do not have access to it. Hence we apply the following line of reasoning to get an estimate of the future cash flows attributable to the fixed operating costs.

1. Toll demand payments are the main source of revenue for the power plant owner. Fixed operating costs are covered from that revenue.
2. Fixed operating costs are independent on the capital structure of the plant (e.g., independent on whether the plant is equity financed or debt-financed).
3. If the plant is being managed on a stand-alone basis (i.e., is not supported by the parent), and if it makes cash distributions from the toll demand payments (e.g., for debt repayment, dividend payments, management fees, etc.) then the fixed operating costs can be covered only from the cash remaining after these distributions.
4. All the plants that JPM tolls are debt-financed at the plant/project level. The information on the debt payments is available in the debt offering memoranda. Further, the offering memoranda provides additional information (such as Debt Service Coverage Ratios, Management Fees, Interest Rate Hedge information) that may be used to infer equity dividends, interest rate swap payments, etc. Note that such information is usually supported by the rating agencies reports produced for the purpose of the financing rating.
5. Consequently, the difference between the toll demand payments and the known distributions (debt/dividend/fees/etc.) provides the upper bound for the fixed operating costs of the plants.

Permanent Subcommittee on Investigations
EXHIBIT #89

6. In certain cases, JPM sold tolls to third parties against the existing tolling positions ("re-tolls"). We believe the demand payments that JPM receives from these re-tolls can be applied to offset the fixed operating cost component of the corresponding existing tolls. For example, assume JPM entered into a 10 year toll with counterparty A whereby JPM pays \$1mm/month to A. Further assume that the fixed operating costs portion of the demand payments is \$400k/month. If JPM re-tolls for 2 years with counterparty B for \$800k/month then the fixed operating costs to be calculated against JPM's 5% limit are fully offset by the re-toll demand payments (as \$800k > \$400k) during the 2 years of the re-toll. If the re-toll demand payments were \$300k/month then JPM would attribute net \$100k/month to the fixed costs out of the \$400k previously determined.
    - Currently, we have partial re-tolls of the AES4000 plant to SCE/CDWR.
    - We assumed that the re-toll netting is done on semi-annual basis (lined up with the debt payments), and excess re-toll payment in one half-year period cannot offset fixed costs for another period.
7. In certain cases we may have a toll on a part of a project/collection of power plants, while other plants of the same project may be tolled separately. The financial information mentioned above (on cash distribution to debt/equity/etc.) is normally available only at the total project level. In such a case we go through further estimates to determine which portion of the total fixed operating costs of the project is attributable to JPM tolls.
    - Huntington Beach 3 and 4 ("HB3,4") units are a part of AES Southland project. They were not initially a part of the BearEnergy AES4000 toll that JPM acquired. The financial (cash distribution) information used for AES4000 is for all of the plants in the project, including HB3,4. We assign the project cash distribution to these tolls according to the respective tolls' megawatt capacities.
8. In certain cases we may have a toll whose term extends beyond the term of the corresponding plant/project financing. Hence, the financial information on the cash distributions from the plant/project is not available for the extended portion of the tolling contract. However, as the extended portion of the tolling contract covers the same power plant/project, we estimate the fixed operating costs of the plant/project to be substantially similar to those during the period we have cash distribution information for.
    - Tolling contract with Tenaska on the Lindsay Hill power plant goes till 2021, as does the financing. The toll is extendible to 2027, and JPM includes the fixed operating costs from the extension period (2021-2027) in the 5% limit calculations. As the demand payments for the extension period are essentially the same as for the preceding period, the fixed operating costs for the extension period are estimated to be the same percentage ~~of the~~ of the total demand payments as they are for the preceding 10 year period.
9. In those cases when there is no information available to JPM for a particular toll, we use extrapolations for the percentage of the toll demand payments attributable to the fixed operating costs. We extrapolate from the cases of the plants we have information for. We make the determination on whether to apply such a percentage based on materiality of the outcome.

B. The 5% calculation calls for JPM to present value of the future fixed operating costs part of the toll demand payments. As the toll demand payments represent JPM's contractual liability, we believe that the correct discount rate is LIBOR plus JPM's credit spread as reflected in the

CDS market. We believe CDS spreads are appropriate as they are the best representation of JPM's pure credit risk and they are the most transparent and observable spreads available in the market. We use the CDS spread corresponding to the tenor of the capacity payment obligation and we use the bid side of the market.

Calculation Summary

The calculations are in the attached spreadsheet. Here are the results in mm$ (rounded):

1. $2,154: the sum of the future values (FVs) of the full demand payments (netted against future values of the re-tolls).
2. $1,770: present value (PV)
3. $564: PV of fixed op costs NET of re-tolls.

Our capacity payment calculation as of month-end November 2010 is $564,248,307.

EXCERPT

FED / OCC / FDIC QUARTERLY MEETING

September 26, 2013

J.P.Morgan

Physical Inventory Limits from FED & OCC

JPMVEC & Non Bank subs Physical Inventory ($'000)

Business	9/28/12	12/31/12	3/31/13	6/28/13
Oil	3,239	3,132	2,640	2,419
Freight	92	99	85	[illegible]
Gas, Emissions, Coal	531	832	584	566
Tolls	2,006	1,928	1,879	1,783
Base Metals & Others	760	167	157	98
Total Phys Inv - JPMVEC	**6,628**	**6,158**	[illegible]	[illegible]
Physical Inventory as % of T1C	4.5%	4.0%	[illegible]	3.0%
Tier 1 Capital	148,425	154,697	163,806	164,027
4% Reporting Req.	5,937	6,188	6,552	6,561
5 % Limit	7,421	[illegible]	[illegible]	8,201
Under/(over) Reporting Req.	(691)	30	1,207	1,608
Under/(over) Limit	[illegible]	[illegible]	2,845	3,248
Base Metals held in Bank	8,157	6,484	5,759	4,991
Total Consolidated Inventory Positions	**14,785**	**12,642**	**11,104**	**9,944**

- Oil inventory decrease driven by decrease in NY Fuel Oil and Plastics as well as Liberty balances
- Base Metals and Others. – inventory decrease driven by reduced holdings in Coffee and Steel
- Base Metals Held in Bank – inventory decrease driven by reduced holdings in Aluminum and Nickel.

Bank Inventory subject to OCC 5% limit

Base Metals held in Bank	Trading Notnl (MT)	Physical Inventory Notnl (MT)	Daily Ratio
As of 9/28/12	76,022	2,984	3.92%
As of 12/31/12	[illegible]	2,357	3.16%
As of 3/31/13	73,873	2,243	3.04%
As of 6/28/13	74,020	2,105	2.84%

- Physical volume (Warrant Notional) is monitored against our financial trading notionals and reported to the OCC on request

J.P.Morgan

FRB-PSI-301387

Akin Gump
STRAUSS HAUER & FELD LLP

STEVEN R. ROSS
202.887.4343/fax: 202.887.4288
sross@akingump.com

October 21, 2014

<u>VIA HAND DELIVERY</u>

The Honorable Carl Levin
Chairman
Permanent Subcommittee on Investigations
Committee on Homeland Security & Government Affairs
United States Senate
Russell Senate Office Building, SR-199
Washington, DC 20510

Re: JPMorgan Chase & Co's Responses to Follow-Up Questions

Dear Chairman Levin:

On behalf of JPMorgan Chase & Co ("J.P.Morgan"), I write in connection with your questionnaire dated January 11, 2013 regarding physical commodities. This submission includes information and documents responsive to additional questions posed by your staff on October 13, 2014. As discussed with your staff, J.P.Morgan is working to provide the balance of the follow-up information requested. Responses to the specific questions are as follows:

Redacted By
Permanent Subcommittee on Investigations

Response to Question 2

($mm)	9/28/2012	9/30/2014
Value of Inventory of Certain Precious Metals Held in JPMorgan Chase Bank, N.A.	**2,656**	**368**
Copper	1,128	368
Platinum	872	-
Palladium	656	-

From:	Lenczowski, Mark
To:	Kirk, Mike
CC:	Nakkab, Armand X
Sent:	1/11/2012 2:59:47 PM
Subject:	FW: Consolidated OCC Summary 10 Jan 2012
Attachments:	OCC Ratio Summary_10012012-xls.zip

From: Babbage, David
Sent: Wednesday, January 11, 2012 9:59 AM
To: Avent, Neal; Holcombe, Nigel; Clift, Neil; Steppacher, Chip; Vicas, Benjamin X
Cc: Lenczowski, Mark; Baines, Nigel F; Nakkab, Armand X; Bromley, Paul; EMEA Metals Product Control; Camacho, Michael A.
Subject: Consolidated OCC Summary 10 Jan 2012

Please note that the aggregate level is subject to a 5.00% limit.

Index	Trading Notnl (MT)	Warrant Notnl (MT)	Daily Ratio	Monthly Ratio
ALUM	40,664,835	3,492,512	9%	9%
NICK	1,172,062	55,397	5%	5%
LEAD	3,233,196	47,448	1%	2%
TIN	98,761	8,037	8%	9%
STEEL	76,735	1,080	1%	1%
ZINC	13,570,287	672,717	5%	5%
Aggregated	**58,815,877**	**4,277,192**	**7.27%**	**7.51%**

David Babbage | JPMorgan | Global Commodities Group | Metals Product Control | Floor 3, 20 Moorgate, London, United Kingdom, EC2R 6DA | T: +44 (0)207 7422877 |

Permanent Subcommittee on Investigations
EXHIBIT #92

From: Lenczowski, Mark [mailto:mark.lenczowski@jpmchase.com]
Sent: Friday, January 20, 2012 12:57 PM
To: Kirk, Mike
Cc: Masters, Blythe; Genova, Diane M.; Camacho, Michael A.; Nakkab, Armand X
Subject: FW: Consolidated OCC Summary 19 Jan 2012

Mike,
Below is the latest report. Pursuant to our remediation plans, we had lent material into the market and believed that we would be under the limit as at Jan 18th, which is an LME delivery date. However the total trading notional dropped from 63 mio tonnes on the 17th to 50 mio tonnes on the 18th, and as a result we were still over the limit. We therefore took further action yesterday to lend 100k tonnes of material to the market as well as sell 400k tonnes of material to JPMVEC. As at close today, these 400k tonnes will transfer into VEC and we will be at 5.07% (assuming the trading notional does not change). The further 100k tonnes delivers Monday, at which time, assuming total trading notional is unchanged, we will be at 4.88%. We expect that total trading notional will continue to rise throughout the month (the 3rd Wednesday is the big delivery date each month), but senior business management decided that we will sell a further 100k tonnes of material to VEC to avoid running too close to this limit. We will transact that today, but again, it will not flow into the numbers until close of Monday evening.

As you know, we calculate the limit as the instantaneous measure of the inventory position divided by the instantaneous measure of the total notional of outstanding derivatives, all measured in tonnes. We would like to investigate with the OCC changing from an instantaneous measure of total notional derivatives positions to a 3 month rolling average, to avoid the volatility caused by third Wednesday deliveries as well as fluctuations in trading notionals from our customer-driven business. We believe a rolling average would be a more accurate measure of our total transactions involving these eligible commodities. If we were to use the 3 month rolling average as of today, we would be at 4.5%.

We look forward to discussing this with you and are happy to answer any questions you might have.

Best regards,
Mark

From: Babbage, David
Sent: Friday, January 20, 2012 12:29 PM
To: Avent, Neal; Holcombe, Nigel; Clift, Neil; Steppacher, Chip; Vicas, Benjamin X
Cc: Lenczowski, Mark; Baines, Nigel F; Nakkab, Armand X; Bromley, Paul; EMEA Metals Product Control; Camacho, Michael A.; Parekh, Amit C
Subject: Consolidated OCC Summary 19 Jan 2012

Please note that the aggregate level is subject to a 5.00% limit.

Index	Trading Notnl (MT)	Warrant Notnl (MT)	Daily Ratio	Monthly Ratio
ALUM	36,440,850	2,326,256	6%	8%
NICK	1,048,359	35,288	3%	5%
LEAD	3,150,228	33,857	1%	2%
TIN	88,976	7,046	8%	8%
STEEL	73,225	300	0%	1%
ZINC	11,478,863	652,349	6%	5%
Aggregated	**52,280,501**	**3,055,097**	**5.84%**	**6.88%**

David Babbage | JPMorgan | Global Commodities Group | Metals Product Control | Floor 3, 20 Moorgate, London, United Kingdom, EC2R 6DA | T: +44 (0)207 7422877 |

Permanent Subcommittee on Investigations
EXHIBIT #93

From:	Masters, Blythe
To:	Kirk, Mike
Sent:	1/20/2012 6:31:48 PM
Subject:	FW: Consolidated OCC Summary 19 Jan 2012

Mike
Thanks for your consideration. It will not happen again that you learn about it after the fact when it is an issue within our control.
Best rgds
Blythe

Sent with Good (www.good.com)

Permanent Subcommittee on Investigations
EXHIBIT #94

From: Lenczowski, Mark
To: Kirk, Mike
Sent: 2/15/2012 9:26:06 PM
Subject: 5% Limit Calculation

Mike,
Following are our current and proposed methodologies for calculating the 5% limit. Please call or mail me with any questions or comments.
Best regards,
Mark

Current Calculation of OCC limit

The limit is set at 5% and is calculated by dividing the numerator by the denominator.

The numerator represents the total tonnage of physical base metal inventory held within JPMorgan Chase Bank, N.A. (the "Bank") on the particular day for which the limit usage is being calculated (copper is not included). Base metals for this definition include Aluminium, Zinc, Lead, Nickel, Tin and Rhodium.

The denominator represents the sum of (1) the total tonnage of all outstanding base metal derivatives contracts, which includes transactions that will potentially physically settle, trades that will financially settle and options transactions, held within the Bank on the same day as the numerator was calculated and (2) the numerator as of such day.

Proposed Calculation of OCC limit

The Bank proposes to change from measuring the denominator at a single point in time to utilising a rolling 3 monthly average of daily measurements. The reason for this proposed change is to smooth the volatility of the denominator, as at present it can change by as much as 25% on the monthly third Wednesday delivery date on the LME, and thus to present a more accurate picture of the Bank's total transactions involving base metals. The Bank would continue to calculate the numerator as it does currently.

Permanent Subcommittee on Investigations
EXHIBIT #95

From: Greer, Megan [mailto:megreer@akingump.com]
Sent: Monday, November 10, 2014 11:51 AM
To: Gellasch, Tyler (HSGAC); Prober, Raphael; Ross, Steven
Cc: Lueptow, Michael (HSGAC)
Subject: RE: Responses--Take 2

Ty,

Following up on our call on Friday, please find below certain of JPMorgan Chase Bank's (JPMCB's) daily aluminum inventory values and the corresponding LME cash price for aluminum.

On December 21, 2011, JPM Chase Bank's (JPMCB's) total aluminum inventory was 3,322,363 metric tonnes, and the LME cash price for aluminum was $1968.5 per metric tonne, for a total value of approximately $6.54 billion.

At the end of December (as of December 29, 2011), JPMCB's total aluminum inventory was 3,403,571 metric tonnes at $1984.75 LME cash price*, for a total value of approximately $6.76 billion (*this is based on the December 28, 2011 cash price).

By the end of January (as of January 27, 2012), JPMCB's total aluminum inventory had decreased to 2,238,107 metric tonnes.

The peak notional during this time frame was on January 10, 2012, when JPMCB's total aluminum inventory was 3,501,365 metric tonnes, and the LME cash price for aluminum was $2135, for a total value of approximately $7.48 billion. *Note: The inventory was very slightly higher on January 9, 2012 at 3,501,535 metric tonnes, but at a lower price; accordingly, January 10, 2012 was the notional peak.*

We are also checking on the language you sent on the [redacted] transaction, and we will be back to you soon on that.

Best,
Megan

Megan L. Greer
Direct: +1 202.887.4517 | Internal: 24517

Permanent Subcommittee on Investigations
EXHIBIT #96

Akin Gump
STRAUSS HAUER & FELD LLP

STEVEN R. ROSS
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sross@akingump.com

October 30, 2014

VIA HAND DELIVERY

The Honorable Carl Levin
Chairman
Permanent Subcommittee on Investigations
Committee on Homeland Security & Government Affairs
United States Senate
Russell Senate Office Building, SR-199
Washington, DC 20510

[redacted] = Redacted by the Permanent Subcommittee on Investigations

Re: JPMorgan Chase & Co's Responses to Follow-Up Questions

Dear Chairman Levin:

On behalf of JPMorgan Chase & Co ("J.P.Morgan"), I write in connection with your questionnaire dated January 11, 2013 regarding physical commodities. This submission includes further information responsive to the additional questions posed by your staff on October 13, 2014. As discussed with your staff, J.P.Morgan is working to provide the balance of the follow-up information requested. J.P.Morgan's response to the specific question below is as follows:

Question 3: Please describe the large aluminum trade that resulted in over $1 billion of aluminum holdings being booked to JPMVEC. Please include the type and general terms of the financial instrument or transaction that required the hedge and the general terms of the trade, including the relevant dates of the trade, the number of metric tonnes involved, the tenor, and the amount of dollars involved.

Response: The aluminum trade took place between J.P.Morgan and [redacted] in December 2011. [redacted] contacted J.P.Morgan and proposed the trade on December 12, 2011. At that time, as a result of transactions with its clients, primarily investors, J.P.Morgan held a substantial volume of LME aluminum futures contracts that were due to expire, resulting in physical settlement, on December 21, 2011 (the next LME settlement date).

[redacted] proposed that J.P.Morgan swap aluminum warrants that it would receive upon the expiry of those LME contracts in exchange for aluminum warrants that [redacted] then held in Vlissingen, Netherlands, a location that J.P.Morgan viewed as advantageous from a hedging and

Permanent Subcommittee on Investigations
EXHIBIT #97

PSI-JPMorgan-17-000001

▬ = Redacted by the Permanent Subcommittee on Investigations

overall portfolio standpoint.[1] Following [redacted] proposal, the parties negotiated and agreed to a swap transaction in which J.P.Morgan (1) delivered contracts for approximately 860,000 tons of aluminum to [redacted], (2) paid [redacted] a locational premium of ten million dollars, and (3) received from [redacted] warrants for approximately 860,000 tons of aluminum in Vlissingen. The transaction was executed on December 20, 2011. The warrants that J.P.Morgan received as part of the trade were a replacement for the expiring contracts, which served as a portfolio hedge of the customer derivatives book.

From the standpoint of the OCC 5% volumetric limit, the effect of the transaction was (1) to increase the numerator of the ratio by the amount of warrants received from [redacted], and (2) to decrease the denominator – the notional amount of outstanding derivatives – due to the delivery of contracts to [redacted]. What looked like a one-to-one locational swap was in fact a swap of derivatives that were about to expire, resulting in warrants in unknown but likely unattractive locations, for warrants in a known, beneficial location. In addition, the notional amount of outstanding derivatives fell due to decreased activity over the holidays. Consequently, the relevant percentage went from 4.02% on December 20, 2011, the date of the transaction, to 8.42% on December 21, 2011, putting J.P.Morgan over the 5% limit. The percentage steadily decreased from that day, but after discussing the limit with the OCC in early January, J.P.Morgan took additional steps to remedy the breach by selling warrants from JPMorgan Chase Bank, the entity that transacted with [redacted], to JPMVEC in an at-market transaction. The percentage fell below 5% on January 23, 2012, 20 trading days later.

* * *

[redacted]

Redacted By

Permanent Subcommittee on Investigations

[redacted]

[1] As holder of the LME contracts, at expiry J.P.Morgan would receive those warrants the seller of the contracts chose to deliver, which would be those that were cheapest to deliver or, put differently, had the lowest locational premium. This could include warrants at any LME delivery point in the world, and those locations most likely would not have been as beneficial to J.P.Morgan from an economic standpoint.

Akin Gump
STRAUSS HAUER & FELD LLP

STEVEN R. ROSS
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November 5, 2014

VIA HAND DELIVERY

The Honorable Carl Levin
Chairman
Permanent Subcommittee on Investigations
Committee on Homeland Security & Government Affairs
United States Senate
Russell Senate Office Building, SR-199
Washington, DC 20510

Re: JPMorgan Chase & Co's Responses to Follow-Up Questions

Dear Chairman Levin:

On behalf of JPMorgan Chase & Co ("J.P.Morgan"), I write in connection with your questionnaire dated January 11, 2013 regarding physical commodities. This submission includes further information responsive to the additional questions posed by your staff on October 13, 2014. As discussed with your staff, J.P.Morgan is working to provide the balance of the follow-up information requested. J.P.Morgan's response to the specific question below is as follows:

Question 3: Please describe the large aluminum trade that resulted in over $1 billion of aluminum holdings being booked to JPMVEC. Please include the type and general terms of the financial instrument or transaction that required the hedge and the general terms of the trade, including the relevant dates of the trade, the number of metric tonnes involved, the tenor, and the amount of dollars involved.[1]

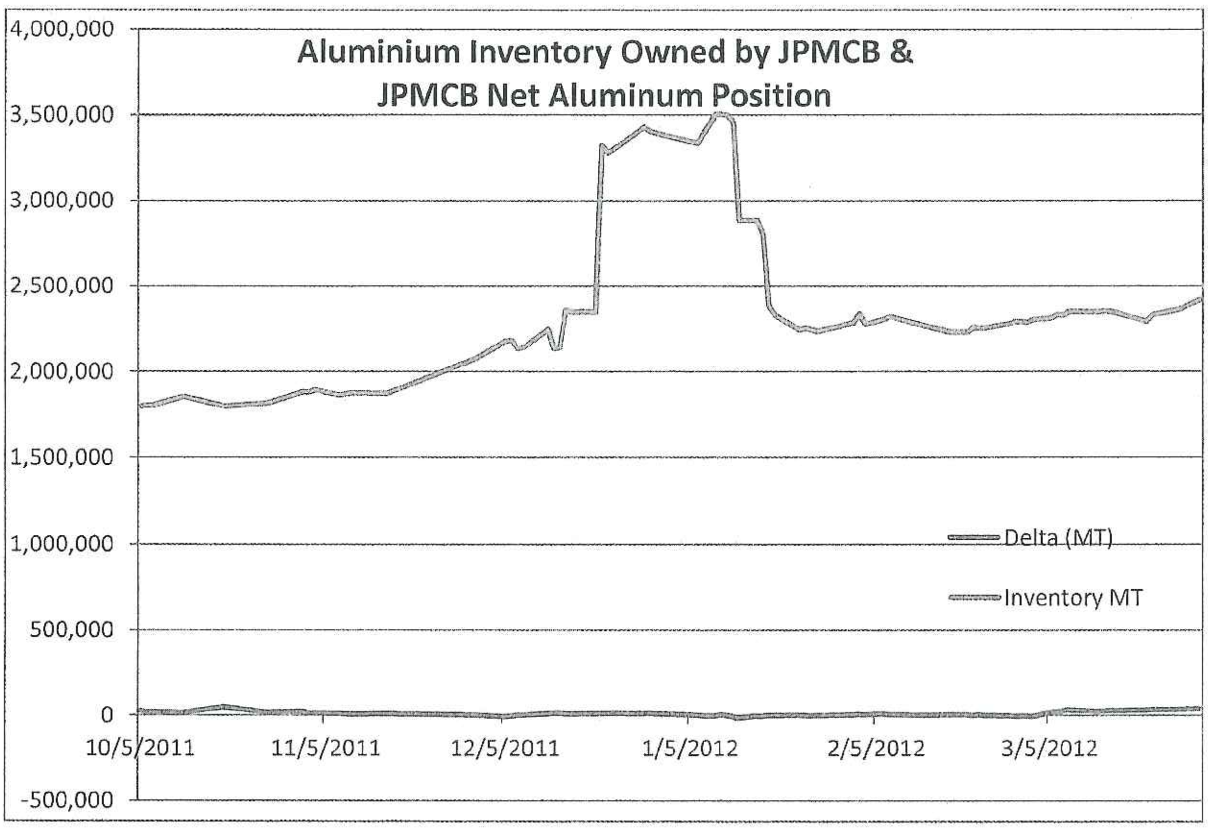
Response: In addition to the information provided by J.P.Morgan on October 30, 2014, and in response to further specific questions, J.P.Morgan has determined the following: on January 19, 2012, JPMorgan Chase Bank, N.A. ("JPMCB") sold, in an arms-length, at-market transaction, 419,400 metric tonnes of aluminum to JPMVEC at $2,196.75 per metric tonne, or approximately

[1] And specifically with regard to additional information requested by Subcommittee staff by email on November 3, 2014.

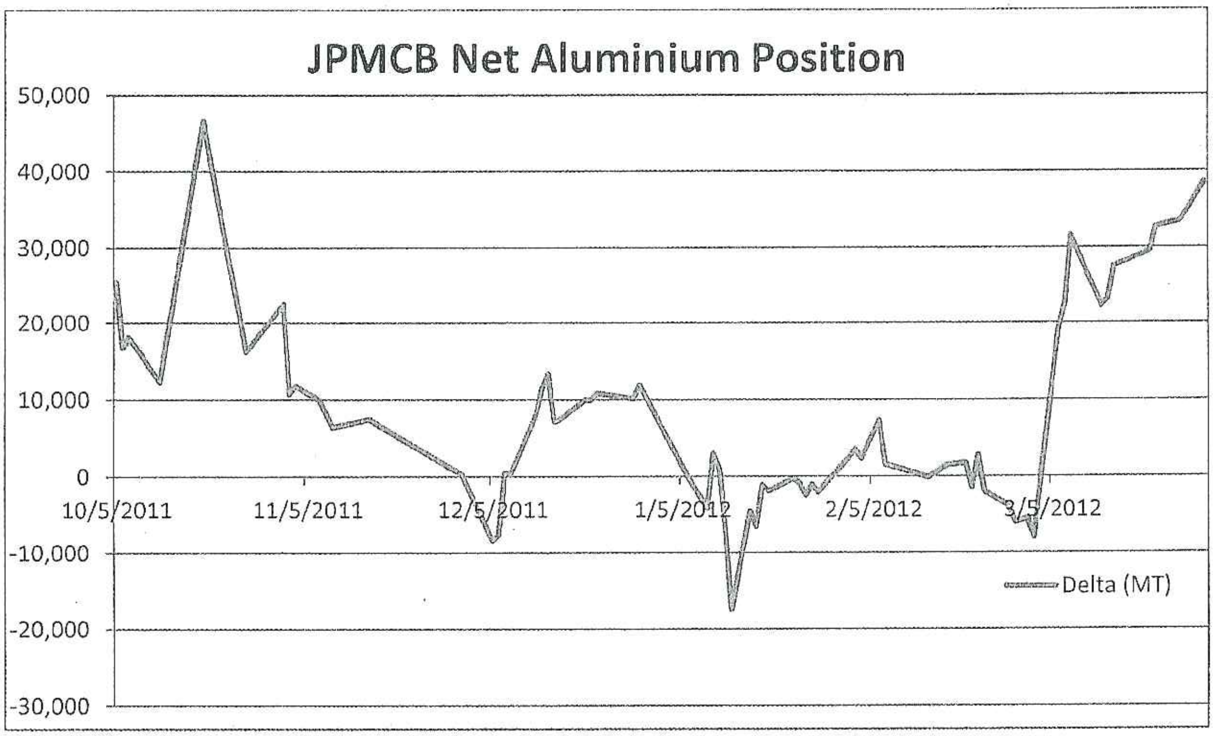
Permanent Subcommittee on Investigations
EXHIBIT #98

$921 million. That transaction settled on January 20, 2012. The position was hedged with forward contracts.

Further, for reference, the chart below indicates JPMCB's total aluminum inventory and its net aluminum position, which represents the delta between JPMCB's long inventory and short forwards, from October 5, 2011 to March 30, 2012.



The second chart details more fully the red line above, showing JPMCB's net aluminum position. As you can see, during this timeframe, JPMCB's net aluminum position ranged from short 17,517 metric tonnes to long 46,569 metric tonnes.



* * *

Redacted By

Permanent Subcommittee on Investigations

Simmons & Simmons

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Our ref FMFS/081187-00001/JYM/JYM
Your ref

27 January 2014

Richard Armstrong
Legal Counsel
The London Metal Exchange
56 Leadenhall Street
London
EC3A 2DX

By Hand and Email

CONFIDENTIAL TREATMENT REQUESTED BY
MERO INTERNATIONAL TRADE SERVICES LLC

Dear Sirs

Notified Investigation - Questions requiring responses

This letter is submitted on behalf of our client, Metro International Trade Services LLC ("Metro"), in response to the London Metal Exchange's ("LME's") Notice of Investigation dated 4 December, 2013 and Questions requiring responses dated 6 December, 2013. Metro responds below to the Questions, which we have included below for your convenience.

We hope that this letter and the attached materials address the LME's enquiries but would welcome the opportunity to meet with you to discuss your enquiries further.

Question 1. Kindly populate a table, in the format set out in Appendix A, to show all metal moved from one shed or position within the LME-listed Metro International Trade Services LLC ("Metro") location in Detroit to another shed or position within the same LME-listed Metro Detroit location, from April 2012 to present. Please populate a row for each consignment of metal cancellations, meaning each significant batch of metal relating to cancelled warrants e.g. in Metro's e-mail dated 31 October 2013 to Hilary Pepperman regarding metal eventually placed back on warrant in which you advised that 25,000 tonnes was cancelled on 7 November 2012, it also detailed that 18,850 tonnes was cancelled on 8 November. Therefore the first cancellation would be placed on one line and the second on the next, etc. The following questions should be read to relate to all such metal and deliveries.

Response: In response to Request No. 1, enclosed please find a spreadsheet entitled Appendix A reflecting information for the relevant movements of metal identified above from records that Metro maintains in the ordinary course for its own business purposes.[1] Appendix A covers

[1] Appendix B referred to herein was prepared in the same manner.

cancellations relating to such metal moved during the period from 1 April, 2012 to the date of this letter (the "Transactions").

Question 2. Please state whether you consider that such movements of metal fulfilled part of, or all of, your delivery load-out obligations over the period in which they took place? If yes, please explain why.

Response: Metro considers the movements of metal identified in Appendix A to have counted towards satisfying Metro's delivery load-out obligations. Specifically, Metro considers metal that is loaded free on truck ("FOT"), at the owner's instruction, in accordance with the order of priority required by the LME and entitling the warehouse operator to the FOT fee, to count towards the operator's load-out obligations. At that point, the warehouse operator has released possession of the metal and thus has loaded-out the metal from its warehouse. The LME has long recognized the right of the metal owner to decide what to do with free metal, and, as the operator of LME-approved warehouses, Metro is bound to respect the owner's instruction.

Metro provided LME auditors (PricewaterhouseCoopers LLP) with detailed documentation to substantiate its compliance with these standards as part of inventory audits in 2012, including bills of lading (copies of which are attached) identifying the shipper, recipient and destination address of a Metro Detroit facility. That audit was intended to reconcile the live and cancelled LME warrants with LME records published in SWORD. LME auditors reviewed these bills of lading on site, and copies were also provided to the auditors for their records. The PWC auditors presented their draft summary of the annual audit for 2012 ("Audit Summary") to Metro, which was reviewed in person with Metro personnel and signed and countersigned by the parties to indicate that this shipped metal with an associated bill of lading constituted valid load-out documentation. No material issues were noted in the Audit Summary in this respect or raised subsequently in correspondence.

Question 3. Please detail how the deliveries were reported to the LME. Please explain how you feel the relevant stock reporting requirements were complied with, in respect of these deliveries (if you indeed consider that this is the case)?

Response: For purposes of its inventory reports, consistent with LME requirements, Metro deducts metal from its inventory once a bill of lading has been signed by both Metro and the truck operator to reflect a transfer of possession from Metro with respect to at least 50% of the material associated with a particular warrant. Metro provides this information to its London Agent, ICS, who in turn enters the information into the LME's SWORD system database for purposes of LME's public inventory reports.

Question 4. For the cancellations in question, please provide a chronological timeline of:

a. cancellation of the warrants

b. scheduling of the delivery of the metal;

c. any approach to negotiate retaining the warrants within the Metro Detroit location; and

d. the movement of the metal.

Response to 4(a), (b) and (d): The information requested is contained in the attached spreadsheet in Appendix A and Appendix B.

Response to 4(c): We assume this question is meant to cover the commercial alternatives that Metro offers its customers with respect to metal storage and the related financial arrangements.

As a general comment, Metro's interaction with customers, the overwhelming majority of which are sophisticated financial entities engaged in broader metals trading activity, varies on a case by case basis. Metro entertains an ongoing commercial dialogue with its customers. These discussions are fundamentally directed at the choices faced by a market participant holding free metal, which were described in detail in the LME's Public Report of the LME Warehousing Consultation (5.3.2). Specifically, like its LME and non-LME warehouse competitors, Metro offers commercial alternatives to its customers in relation to off-warrant storage. For an agreed quantity of metal, the customer, at the scheduled shipment date of its cancelled warrants, may (1) instruct shipment to a particular destination, such as the premises of a consumer or a non-Metro storage facility, or (2) instruct shipment to a Metro Detroit facility for off warrant storage at negotiated rent rates. While storing metal off-warrant, the customer may at any time (2.a) instruct shipment to a consumer or other non-Metro facility, or (2.b) instruct Metro to create new warrants, i.e., re-warrant the metal. Consistent with industry practice, Metro provides customers with physical warehousing services and optionality that support LME and off-LME metals trading activity, including providing a backstop to the customer's trading activities as referred to in the LME's Public Report of the LME Warehousing Consultation (5.3.2). Depending on its prevailing economic rationale, the customer will exercise one or several of the available options, as was the case with regard to the cancellations discussed here.

A time line setting out the dates on which particular arrangements relating to the cancellations in question were entered into is set out in Appendix B.

Question 5. Were incentives offered to keep the material within the Metro Detroit location? If so, what were the incentives? Please specify the level, form and payment method of any incentives. Who paid the incentives? Who brokered the deal? Please provide supporting documentation, correspondence with third parties and an audit trail for your answers to this question 5.

Response: Consistent with industry practice, Metro negotiates incentives as a means of attracting metal to be placed on warrant at its warehouses. Metro does so in the context of a highly competitive environment in which it competes with other LME and non-LME storage options. We refer you to the general comments set out in the response to Question 4(c). Incentives offered or provided by Metro or its competitors may include payments as reimbursement for freight or other costs incurred by the customers (including, for example, previously incurred FOT fees) or as an inducement to direct metal to Metro. Metro offered such incentives in respect of the Transactions reflected in Appendix A. Details regarding the incentives offered, which were negotiated over the course of the Transactions and were payable by Metro at warranting, if elected by the customer, are reflected in the attached spreadsheet in Appendix B. Also attached are copies of emails reflecting material terms, key parties involved and the sequence of relevant events. We would be pleased to discuss any additional documentation which you may find helpful.

Question 6. It was stated by a senior Metro staff member during the warehouse audit in late October 2013 that Metro took legal advice from counsel at Goldman Sachs before entering into the deal. Please provide the reason advice was sought.

Response: It appears that there may have been a misunderstanding. Metro did not, as far as it is aware based on a reasonable enquiry, seek advice from counsel at Goldman Sachs prior to entering into the Transactions. That said, as a matter of practice, all transactions entered into by Metro are appropriately vetted. The vetting process will vary based on the judgment of Metro's management and, to the extent relevant, Metro's board of directors. Depending on the particulars at issue, such vetting may involve review by legal counsel or other advisors. Metro regards its vetting practices to be a matter of sound corporate practice and governance.

Question 7. Bearing in mind that legal advice was sought by Metro (see question 6 above) and the obligation under clause 11.10 of the Terms and Conditions applicable to warehouse companies (the "Warehouse Agreement"), why did Metro not contact the LME before undertaking this process?

Response: See Response to Question 6. Appropriate approvals are part of Metro's normal business procedures. We note as a general proposition the fact that a legal review takes place or that legal or other advice is provided does not in and of itself trigger clause 11.10.

Question 8. Please confirm who paid for and organized the movement of metal between warehouse sheds. Please provide all relevant documentation and correspondence with third parties in relation to this.

Response: Attached are copies of emails showing the shipping instructions for each of the relevant releases (see Response to Question 1). On instructions from the metal owners and on their behalf, Metro organized and compensated the carriers for the movement of metal from its sheds. Relevant email correspondence with the carriers for each release is also attached. We are happy to discuss any additional documentation which you may find helpful.

Question 9. In relation to the metal that has been placed back on warrant, please set out how Metro satisfied itself that each warrant was for the appropriate weight at the time any of this material was placed back on warrant (see clause 2.1.2 of the Warehouse Agreement). Please provide copies of your records of weighings undertaken and any other relevant documents.

Response: Consistent with the standard protocols for any new metal arriving at Metro's warehouse, warrant details were validated. Metro used copies of its original Warrant Receiver documents and validated the weight by re-weighing the metal. Metro further validated all other warrant details, including heat numbers, shape, brand and size. Please note that where discrepancies were detected, the relevant documentation was modified accordingly. Copies of Warrant Receivers for all metal placed back on warrant with respect to the Transactions are attached.

Please be advised that the information and spreadsheets provided herein did not previously exist in the form requested, and their compilation required the application of technical and manual processes in order to collect and present the requested information. While we believe the spreadsheets are reasonably accurate and complete, we cannot make an absolute representation that they are or that there were not inadvertent errors in their preparation. We will provide any corrections if we discover missing information or errors.

Pursuant to Clauses 7.3.3 and/or 9.3.3 of the Warehouse Agreement, Metro requests confidential treatment of the attached materials on the ground that disclosure of such material would reveal trade secrets or confidential commercial or financial information of Metro or its affiliates, or protected personal information. Furthermore, the disclosure of the attached materials may not only violate Metro's or its affiliates' proprietary rights, but may also grant competitors an unfair competitive advantage or compromise competitive advantages possessed by Metro and its affiliates, and prejudice Metro's commercial interests. Metro considers that the attached materials are therefore exempt from disclosure pursuant to, *inter alia*, section 43 of the Freedom of

Information Act 2000. Metro also requests that this letter requesting confidential treatment not be disclosed for the aforementioned reasons.

Should the LME wish to publicly release the attached materials or information contained in this letter, or be requested to do so pursuant to the Freedom of Information Act 2000 or otherwise, Metro respectfully requests reasonable notice of its intent to do so, or of any such request, and the opportunity to make representations and to object to such a release or the provision of information pursuant to such a request.

Please contact Jonathan Melrose at 0207 825 4514 with any questions.

Yours faithfully

Simmons & Simmons LLP

(Attachments:
Appendix A
Appendix B
Q2 – Bills of Lading
Q5 – Incentives: supporting documents
Q8 – Movement of metal: shipping instructions; correspondence with carriers
Q9 – Validation of warrants: copies of Warrant Receivers)

Simmons & Simmons

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Our ref FMFS/009524-00016/JYM/JYM

Your ref

15 April 2014

CONFIDENTIAL TREATMENT REQUESTED BY
METRO INTERNATIONAL TRADE SERVICES LLC

Attn: Richard Armstrong
Legal Counsel
The London Metal Exchange
56 Leadenhall Street
London, UK EC3A 2DX

COPY

By Hand and By Email

Dear Sirs:

Notified Investigation – Questions Requiring Responses

This letter is submitted on behalf of our client, Metro International Trade Services LLC ("**Metro**"), in response to the letter of the London Metal Exchange ("**LME**") dated 10 March 2014 (Notice of Investigation - Further questions requiring responses (the "**Questions**")) regarding Metro's 27 January 2014 response. As we explained in our 27 January response, in determining the relevant transactions, we identified certain movements of metal relating to warrants that were cancelled during the period 1 April 2012 to 27 January 2014 (the "**Transactions**").

Before addressing the LME's specific Questions, we believe that providing some overall context for Metro's responses would be helpful. In light of industry practice and market dynamics as described in the LME's statements and the Summary Public Report of the LME Warehousing Consultation Pursuant to LME Notice 13/208 (November 2013) (the "**Report**"), Metro believes that it has complied fully with the relevant rules with respect to the Transactions.

We note that the LME's questions about queues cannot be considered in isolation and instead must be examined in light of broader macro-economic factors, the system established by the LME, and market participants acting in their economic interest (including their interest to "always follow the route which yields the highest price for the free metal" (Report at 38)) - all of which operate independently of Metro's activities in connection with its provision of warehouse services.

Since the global economic crisis in 2008, the production of aluminium has exceeded consumption each year, resulting in an unprecedented stockpile. The robust contango throughout this same time period - in combination with very low interest rates - has motivated market participants to seek storage for aluminium. Given this global surplus and increased demand for warehouse services, the LME has approved a significant expansion in warehouse capacity primarily in certain geographic regions, and warehouse companies, like Metro, organized their business (*e.g.*, staffing level, investment, and building specifications) based on the then-prevailing LME operational parameters (*e.g.*, LME-compliant load-out rates, building access, and logistical capabilities) to respond to this unprecedented and rapid increase in LME storage demand. Under this system, a massive inventory of metal was stored in LME-approved warehouses. More recently, market participants have sought to retrieve metal from LME warehouses and cancelled a substantial amount of warrants, which warehouses dealt with in accordance with LME requirements. Such cancellations have been partially driven by market participants looking for off-warrant storage. As estimated by Wood Mackenzie in 2013, a leading industry source, about 8.4 of the 13.9 million metric tons of aluminium in storage are stored outside the LME warehouse system.

Cognizant of these dynamics, the former chief executive of the LME, Martin Abbott, recognized that aluminium delivery queues in some locations "are the result of broader macro-economic forces at play in the aluminium industry" - rather than the result of the practices of any particular warehouse operator - and that "the proper role of the LME is to reflect the effect of those macro-economic forces and not try to distort them." (Approved Judgment of the High Court of Justice, Queen's Bench Division, Administrative Court, Case No. CO/1767/2013, dated 27/03/2014, at ¶ 30 (the "**Rusal Judgment**").)

We also note the very competitive nature of the warehouse services market. As the LME notes in its Report, the "warehouses are part of a competitive metal ecosystem." (Report at 38.) In an effort to attract metal, "it has become common practice for warehouse operators," like Metro, "to offer 'incentives' to metal owners to attract load-in of metals." (*Id.* at 32.) Even in a market where incentives are routinely offered, "normal economic principles of competition continue to apply." (*Id.* at 34.) Such competition is especially vibrant given the numerous options available to metal owners. As the LME recognizes, "[a]t the core of the economic system is the choice faced by a [metal owner] holding free metal in the market," including selling to a physical user, disposing warrants on the LME, or continuing to store the metal either on-warrant or off-warrant. (*Id.* at 37.) "Ultimately, it is the right of a metal owner" - like Glencore and Red Kite - "to decide what to do with free metal." (*Id.* at 38.) Indeed, the "economic decision[s]" of these highly sophisticated entities with which Metro entered into the relevant transactions "provide[] an explanation for the so-called yo-yo trade, under which metal is loaded-out of one warehouse and into another." (*Id.* at 38.)

We further note the LME's role as "a market of last resort" (*id.* at 68 n.81): historically, only a very small portion of the annual purchase of aluminium by consumers has come from the LME system and end-users do not constitute a meaningful number of metal owners in the Detroit queue. In the summer of 2013, Metro's parent, Goldman Sachs, offered to take the place of client end-users in the queue in exchange for spot aluminium, but this offer elicited no response from end-users given the overall abundant supply. Indeed, the absolute price of aluminium has remained substantially lower than it was before the financial crisis and is also low in comparison to the price of other commodities.

Against this backdrop, Metro responds below to the Questions, which we have included for your convenience. To the extent that the LME has further questions about our response, Metro reiterates its offer to meet in person and is prepared to make its management available at your convenience.

<u>Question: Your response to our Question 2</u>

You state: "*Specifically, Metro considers metal that is loaded free on truck ("FOT"), at the owner's instruction, in accordance with the order of priority required by the LME and entitling the warehouse operator to the FOT fee, to count towards the operator's load-out obligations*". Please explain further why you believe this to be the case. In particular, it would assist us if you could identify the particular LME Rules you rely upon in support of that assertion or, as may be applicable, the basis upon which you believe such LME Rules do not apply in the circumstances of this case.

<u>Response</u>: LME warrants are issued by a warehouse operator, but they relate to metal stored in individual sheds. Pursuant to U.S. commercial law and consistent with Metro's terms and conditions for the provision of warehousing services (which are referenced on the actual printed LME warrant), once a warrant has been cancelled and metal has been loaded "free on truck" ("FOT") (on an appointment date requested by the owner and according to the LME queue rules) and the bill of lading has been signed, the warehouse operator has released possession of the metal and has no right to charge LME rent, and the risk of loss or damage is transferred entirely to the carrier for onward delivery at the owner's instruction. Indeed, once a bill of lading has been signed, the carrier is liable for any losses as a matter of law and contract, and neither the carrier nor the owner has any further recourse against the warehouse operator. At this stage, the metal is "free metal" (*see* Report at 38) under the full control of its owner and over which the owner has full dispositive discretion and responsibility. As such, Metro regards the metal as having been loaded out and reduces its LME inventory stocks accordingly.

Once possession of the metal has been transferred as described above, evidenced by the signing of the bill of lading, the metal is no longer "in warehouse" (the LME aluminium futures contract is an "in warehouse" contract) - its status changes from cancelled warrant to off-warrant. The warehouse has adhered to the load-out order of priority required by the LME, and the owner of metal, which likewise regards such metal as "free", is no longer subject to the rules or rent obligations of the LME system. In contrast, if the carrier failed to collect the metal when scheduled and no bill of lading was signed, the owner would continue to be obliged to pay LME rent and Metro would not deduct the metal from its LME inventory stock reports. Such treatment of "free metal" is consistent with the stock reporting requirements pursuant to Clause 6.3 of the Warehouse Agreement. That provision provides that "[u]ntil such time as stocks of metal are reported pursuant to LMEsword . . . metal taken off Warrant, but which is still on the Warehouse's premises, must be combined on the stock return with those stocks actually on Warrant . . . or shown in such other manner as prescribed by the Exchange by notice." This "free metal" loaded out as described above has, in Metro's view, left the relevant "premises" - *i.e.*, the shed to which the cancelled warrant relates.

Metro's treatment of such "free metal" is consistent with the LME's own practice. In connection with the LME's administrative audits conducted since Metro began its warehouse operations, Metro has provided the LME with requested outbound documentation such as bills of lading - including certain bills of lading that identified the destination address of a Metro Detroit facility - among other records. In reconciling such documentation with specific stock reports, the LME has invariably accepted a signed bill of lading as sufficient evidence of outbound shipment, and such acceptance has never been contingent upon the shipping destination. Indeed, the LME has never raised any issues with respect to the bills of lading as evidence of outbound shipment. As explained in our 27 January response, the LME's own auditor, PricewaterhouseCoopers, has likewise reviewed numerous bills of lading identifying the shipper, recipient and destination address of a Metro Detroit warehouse, and no material issues were noted in the Audit Summary or raised subsequently in correspondence. Consistent with this LME practice, Metro believes that the load-outs of metal from the sheds in which it was stored pursuant to the Transactions were appropriately counted towards Metro's minimum load-out requirement. Indeed, any other interpretation of the minimum load-out rule would constitute a material increase in the warehouse company's obligations, thereby triggering the "consultation and notification" requirement under the Warehouse Agreement. (Clause 4.2; *see also* Clause 9.11.4 (90 days of consultation must be undertaken where any proposed change would have the effect of "materially increasing the obligations of a Warehouse").) Metro has received no such consultation or notification from the LME.

<u>Question: Your response to our Question 5</u>

(a) **You did not address who brokered the deal. From the emails appended to your response, it appears that Metro staff brokered the deals, but please confirm in each instance who brokered the deal.**

<u>Response</u>: We understand that by "brokered," the LME is referring to the party that originally initiated the Transactions. As we explained in our 27 January response, Metro engages in an ongoing commercial dialogue with its customers - the overwhelming majority of which are sophisticated financial entities involved in broader metals trading - about various existing and potential deals. In light of this continuing relationship and fluid interactions, and based on reasonable inquiry, Metro is unable to pinpoint which party first initiated the Transactions. To the extent that the emails appended to our 27 January response provide any insight, we note that in the email dated 1 November 2012 relating to DET 1500, a Metro representative stated to a Red Kite representative, "Thanks for approaching me with an opportunity to store approximately 150,000 mt of aluminium which you are holding LME warrants for currently."

(b) **We require a fuller, more detailed picture of these deals than you have provided to date. The Appendix B that you have populated appears to give the options available to the customer ("*If re-warranted" / "If arrangement cancelled and shipped to non-Metro facility*") but it is not made clear in that table which option was exercised by the customer in each case. Kindly make this explicit, i.e. provide details of each arrangement from the start to the end of each offer and acceptance and execution of the incentive—who were the parties involved in negotiating, concluding and executing the arrangement; what was paid, to whom and when. Please provide clear cross-references to the relevant sections of supporting documentation.**

<u>Response</u>: Respectfully, we believe that we provided the requested information in the appendices to our 27 January response, which should be read together. With respect to the Glencore deal, Row 5, column M of Appendix A indicates that the metal was re-warranted.[1] With respect to the remaining deals, Appendix A sets forth the options exercised by the customers. Specifically, this information is presented in column G ("of which re-issued prior to shipment"),[2] column H ("of which shipped to Non Metro facility"), column I ("of which shipped off-warrant to Metro facility") and column M ("Date New LME Warrant Created (if applicable)"). As noted in footnote 2 to Appendices A and B that we previously provided, for certain tonnage, customer instructions had been provided but not yet performed, or customer instructions were not yet provided.

[1] As we explained in the Appendix A that Metro previously submitted on 27 January, by "re-warranting" or "creating a new warrant," we mean that a warrant is created at the request of the customer for metal that was previously on-warrant in another warehouse but has been cancelled and shipped out.

[2] As we also explained in the Appendix A that Metro previously submitted on 27 January, by "re-issuance," we mean that a warrant is re-issued prior to shipment at the request of the customer. Metal is no longer part of cancelled warrants, and the delivery slot is allocated to customer(s) next in queue.

In an effort to present the information in a consolidated format as you requested, we have prepared a new Appendix A (Attachment 1, Tab 1) ("**Consolidated Summary**") and have made additional clarifications. Specifically, we have prepared a "Simplified Off Warrant Storage Deal Example" (Attachment 2) ("**Simplified Example**"), which outlines the steps that are referred to in the column headings of the Consolidated Summary. A shipping schedule per Release, showing shipped from/shipped to addresses is also attached (Attachment 1, Tab 2) ("**Shipping Schedule**") (*see also* response to Question: Follow-up questions on Appendix A, (a) below). Please note that the Consolidated Summary has been updated to reflect customer instructions that Metro received after its original submission. The information provided by Metro in response to the LME's Questions Requiring Responses dated 6 December 2013 has not otherwise been updated.

With reference to the parties involved in negotiating the Transactions, this is dealt with in our response to Question (a) above.

With respect to the timeline for the Transactions, we refer you to the Consolidated Summary.

With respect to the timing, nature and amounts of incentives, we have attached a spreadsheet (Attachment 3) ("**Invoice Summary**") that lists all invoices received and issued for the Transactions, as well as copies of the invoices referred to in the spreadsheet (Attachment 4) ("**Deal Invoice Copies**").

(c) **We requested an audit trail. We note that the emails you appended to your response only clearly state the incentives offered by Metro, and again do not necessarily set out whether those offers were taken up and/or what the outcome of the deal was. Again, please make the position explicitly clear.**

Response: As explained above in response to Question (b), we believe that Appendices A and B reflect which offers were taken up and/or the outcome of the Transactions. In response to your request, we have provided the requested information in the Consolidated Summary. Information relating to the level, form and payment method are set out in the Invoice Summary and the Deal Invoice Copies.

Question: Your response to our Question 7

(a) **Please confirm whether any consideration was given to making enquiries of the LME as to the appropriateness or otherwise of these deals? If not, why not?**

Response: As explained in our 27 January response, all deals entered into by Metro, including the Transactions, are appropriately considered and reviewed. Depending upon the specific facts and circumstances, such process may vary based on the judgement of Metro's management, and to the extent relevant, it may include a review by Metro's board of directors or a subcommittee thereof, legal counsel or other advisors. Metro regards its process for reviewing all transactions to be a matter of sound corporate practice and governance and therefore did not make enquiries of the LME regarding the Transactions. The LME and its auditors likewise never raised any issues with respect to the movements of metal at issue in connection with, respectively, its administrative audits and its 2012 audit.

(b) **Please give details of the specific *"approvals"* and/or *"vetting"* which you reference that was undertaken in relation to these deals. Please provide your records of these approvals/vetting. For the avoidance of doubt we are not asking you to disclose to us legally privileged material.**

Response: As part of its review process, Metro's management considered various economic, market and business factors with respect to the Transactions. Metro's management also sought and received approvals on 1 November 2012 (Red Kite) and 14 February 2013 (Glencore) from a subcommittee of Metro's board of directors, the Commercial Decisions Subcommittee, which is responsible for approving certain expenditures above a pre-established threshold. The Metro board was subsequently advised of these approvals.

Question: Your response to our Question 8

You state that "*Metro organized and compensated the carriers for the movement of metal from its sheds.*" On the face of it, this may constitute an incentive, and yet this incentive is not set out in your Appendix B. Again, please can you re-present an explicitly clear and complete statement of the incentives offered and taken up, as well as providing clear cross-referencing to the supporting documentation such as emails and bills of lading.

Response: In preparing Appendix B, Metro did not include the compensation paid to carriers because Metro did not regard this as an incentive to re-warrant metal; rather, Metro agreed to pay such compensation even if the metal owner decided not to re-warrant the metal (in light of the commercial opportunity to store metal in Metro warehouses on-warrant or off-warrant). In response to the LME's request, in the attached Consolidated Summary, the column entitled "General Off-Warrant Terms" contains the requested information about compensation paid to carriers.

Question: Your response to our Question 9

(a) **What are the "*standard protocols*" to which you refer? Please provide copies and any related documentation.**

Response: The referenced protocols are Metro's Weighing and Warranting Procedures. A copy of each is attached (Attachment 5) ("**Weighing Procedures**") (Attachment 6) ("**Warranting Procedures**").

(b) **You state that "*where discrepancies were detected the relevant documentation was modified accordingly*". Please can you highlight specific examples in the supporting documentation and cross-reference them.**

Response: Attached (Attachment 7) ("**Example Modified Warrant Receivers**") are four examples of modified Warrant Receiver documents and a copy of the respective original Warrant Receiver documents. The following is a summary of the changes:

Original Warrant #	Weight	New Warrant #	Weight
W10440	24,057	HHW10440	25,034
W10421	25,065	HHW10421	24,981
W10470	25,050	HHW10470	25,064
W10441	25,070	HHW10441	24,934

Note that the yellow highlighted bundle details on the new Warrant Receiver documents show a change in original bundle details.

(c) **You state "*Metro used copies of its original Warrant Receiver documents and validated the weight by re-weighing the metal*". Did Metro use the original Warrant Receiver documents, or copies of the original Warrant Receiver documents? If the former, is it correct to say that where the Warrant Receiver documents were then modified to account for "*discrepancies*", no un-modified version of the Warrant Receiver document remains in relation to the original weighing?**

Response: Metro used copies of the original Warrant Receiver documents.

(d) **Please explain whether Metro considers this process of re-using and amending previous notes of weighings to be consistent with its obligation under Clause 11.7 of the Warehouse Agreement to "*keep proper records*".**

Response: Metro believes that it is in full compliance with its recordkeeping obligations pursuant to Clause 11.7 of the Warehouse Agreement to "keep proper records". Metro maintains Warrant Receiver documents for all individual warrants received into its warehouses, *i.e.*, a unique Warrant Receiver for each unique warrant number.

Question: Follow-up questions on your Appendix A

(a) **We note that in each row, there are instances of the same address appearing in both the "*Address departed*" column and the "*Address arrived*" column. Please confirm whether the metal actually moved from one address to a different address in each case and cross-reference to the appropriate supporting documentation. If there are any instances where metal did not move address, please provide details and confirm whether such "movements" were counted against your load-out obligations.**

Response: The information presented in Appendix B was aggregated, and some addresses may for that reason have appeared in both the "*Address departed*" column and the "*Address arrived*" column. However, each load was indeed delivered to a different address.

Columns O and P of the Consolidated Summary reflect a breakdown of shipping schedules per release, which are set out in the Shipping Schedule. We are also attaching a spreadsheet in respect of DET 1500 (Attachment 8) (**"DET 1500 – Carrier Invoice and BoL Cross Reference"**) and DET 1524-1524S (Attachment 9) (**"DET 1524-1524S – Carrier Invoice and BoL Cross Reference"**) which identifies all 6,600 bills of lading representing the movement of metal summarised in the Consolidated Summary, and the respective carrier and invoice details for each load. These confirm that for each load, metal was delivered to a different address.

Copies of the bills of lading broken down by Release are attached (Attachment 10) (**"Copies of Bills of Lading by Release"**).

We have provided by way of illustration copies of six sample invoices (the relevant rows on DET 1500 – Carrier Invoice and BoL Cross Reference to which these invoices relate are highlighted in yellow for ease of reference) (Attachment 11) (**"Sample Courier Invoices"**). We have not provided all invoices as a result of the volume of information, and the fact that the Bills of Lading already show the same relevant information.

(b) Kindly re-present the material in Appendix A to clearly list each shipment of metal from one address to another on separate rows. Please cross-reference each shipment from one address to another to the appropriate supporting documentation for that shipment, including correspondence you have provided (or will be providing as a result of this letter).

Response: See response to Question (a).

Question: Follow-up questions on your Appendix B

(a) In the first row, for Glencore, the "*Deal Date Confirmed*" is stated as "*23 Feb 13 & 4 April 13*". Please explain how there can be two dates for confirming the deal.

Response: The tonnage for the Transaction in question was modified at a later date pursuant to the customer's request.

(b) Please explain what you mean by a "*Pre-paid Incentive*". When, exactly, was this offered and paid in each case? Please provide cross-references to any references to pre-paid incentives in the documentation you have already provided; or provide full documentation in accordance with our previous Question 5, which required you to provide an audit trail for all incentives.

Response: For the Transaction involving Red Kite, Metro and the customer, a highly sophisticated financial entity, negotiated an incentive in case the customer decided to exercise its option to re-warrant the metal. A portion of the incentive was agreed to be "pre-paid," at the time of cancellation to offset FOT charges. If the customer decided not to re-warrant the metal, this pre-paid amount was reimbursed to Metro as part of the break-fee. As such, a "pre-paid incentive" can be considered equivalent to incentives on deals where the full amount is paid at the time the metal is warranted.

(c) In the "*Pre-paid Incentive*" column you have put "*N/A*". Does this mean that no pre-paid incentive was offered, or that one was offered but not taken up? Please re-present the information and clearly distinguish between offers and payments of incentives.

Response: Where it appears in Appendix B, "N/A" indicates that no pre-paid incentive was offered to the customer.

(d) In the "*Pre-paid Incentive*" column you have put "*36*". 36 what?

Response: This represents $36/mt of prepaid incentive.

(e) As previously noted, please re-present the material in Appendix B to provide a full picture of all incentives offered and taken up, including cross-references to supporting documentation.

Response: Please see the Consolidated Summary.

(f) In the "*If re-warranted*" column, what does "*discount of 3cts/t/q on published rent increase*" mean? Please provide a worked example of the calculation of this discount, as it was applied in practice to one of the deals in question. What were the applicable "*published rent increases*"? Please provide full documentation.

Response: Metro agreed that between 1 April 2013 and the new warrant issue date of the shipped metal, the customer would receive a rent discount of 3cts/ton/day on Metro's published 2013/2014 rental rate if the customer decided to warrant the shipped metal. If the customer decided not to warrant such metal, the customer would be charged the full rental rate. Please refer to the email titled "Detroit Ali – off warrant storage deal *NEW DEAL # DET – 1500" from 5 November 2012 that outlines the key terms for this Transaction.

Set forth below is an example of the calculation of this rent discount (on per ton basis)

	per ton
Rent Rate (2012/13)	45 cts/d
Rent Rate (2013/14)	48 cts/d
New Rent Effective	01-Apr-13
Average Re-warranting	20-Dec-13
Calendar Days	263 days
Average Rent Discount	**7.89 $/mt**

Question: Follow-up questions on emails provided

(a) **The email with subject line "*FW: Detroit Ali – off warrant storage deal * NEW DEAL # DET-1500*" refers to "*150,000 mt*". Where is this deal set out in Appendix B? Again, please correct/re-present the material in Appendix B, if applicable, in accordance with the standards set out in this letter.**

Response: The 150,000mt refers to the initial volume that was discussed with the customer. However, the customer subsequently changed the tonnage several times. The final volume of cancelled tonnage included in the Transaction was 188,875mt of which 6,875mt were re-issued by the customer. (For 188,875mt, see the sum of the cells H(6) - H(11) of the Consolidated Summary and for 6,875mt, see cell I(7) of the Consolidated Summary.)

(b) **The email with subject line "*Re: New Deal – Glencore Detroit*" makes reference to Metro providing off-warrant storage free of charge. This may constitute an incentive and, if so, should have been set out in your Appendix B. Again, please re-present the material in Appendix B to include a complete statement of all incentives offered and taken up (including rent discounts, free off-warrant storage, free trucking and inducements in any other form whatever).**

Response: At the LME's request, we have included the off-warrant storage in the Consolidated Summary.

Question: Follow-up questions on incentives

Please state whether Metro considers the movements of metal referred to in this correspondence to be in compliance with Clause 9.3.1 of the Warehouse Agreement, and explain why.

Response: Metro considers the movements of metal pursuant to the Transactions to be in compliance with the Warehouse Agreement. As such, Metro does not consider the incentives it offered to be "exceptional inducements" that "artificially or otherwise constrained" the "proper functioning of the market through the liquidity and elasticity of stocks of metal under Warrant." (Clause 9.3.1 of the Warehouse Agreement.) As the LME has recognized, it is "common practice for warehouse operators to offer incentives to metal owners to attract load-in of metals". (Report at 32.) The LME has also recognized that neither "the existence of the queues" nor "warehouse operators paying incentives" appears "to cause an economically-irrational market, in that normal economic principles of competition continue to apply." (*Id.* at 34.) The incentives for the Transactions were in line with incentives that Metro offered to other potential customers as an inducement to attract their metal. To the extent that Metro was able to sometimes (but not always) attract metal into its warehouses, Metro also believes that such incentives were, in line with inducements offered by other market participants and economic parameters in the market at such times.

The only structural aspect of the Transactions' incentives that distinguishes them from other incentives is that they were offered to a customer at a different point in time in relation to its holding of the metal. That is, these incentives were offered to customers holding metal in inventory or in the queue should they decide to re-warrant the metal at a later stage in the context of an off-warrant deal, rather than to owners of metal that were firmly committing to deposit metal to be warranted. We do not believe that this distinction has any bearing on the interpretation of Clause 9.3.1 of the Warehouse Agreement, however, since accepting the incentive and warranting the metal was but one potential course of action that the customer could choose to take. If anything, the timing of the offering of these incentives for the Transactions simply made them less likely to be provided than is generally the case with incentives.

In negotiating the Transactions with the metal owners, Metro recognized that it was competing in a market in which metal owners had multiple choices for warehouse services. The evaluation of inducements should therefore be considered in light of these options that - as noted by the LME - are available to metal owners: the "metal can be sold to a physical user," the "metal can be financed," the "metal can be sold on the LME," and the "metal can be on-sold to another merchant." (Report at 37-38.) Moreover, "[o]nce a[n] [owner's] metal has reached the front of the queue and becomes free metal, [the owner] will again face the same set of options as to how to sell that metal." (*Id.* at 37.) As the LME has noted, "it is the right of the metal owner to decide what to do with free metal, and there is an economically rational explanation for" metal being "loaded-out of one warehouse and into another." (*Id.* at 38.) It is also important to note in this context that this course of action is generally regarded as a "backstop" by the metal owner (*Id.* at 38) and therefore consistent with the stated role of the LME as "the market of ultimate demand." (*Id.* at 38 n.35).

As recognized by the former chief executive of the LME, Martin Abbott, in a letter dated 21 December 2012 to Rusal, "long aluminium queues in some locations" were "the result of broader macro-economic forces at play in the aluminium industry." (Rusal Judgment at ¶ 30.) In any event, it is worth emphasizing that the overwhelming majority of "free warrants" come from warehouses with longer queues, like Metro's Detroit warehouses. According to the Report, on 19 September 2013, 99% of warrants used in LME settlement were from warehouses with queues. (Report at 31-32.) Far from constraining the "liquidity and elasticity of stocks of metal under warrant," the LME warehouses, like Metro's Detroit warehouses, that have not during the relevant period entered into fixed period storage transactions involving aluminium (which would remove corresponding warrants from the pool of "free warrants") provide virtually all of the liquidity for LME settlements.

Furthermore the Transactions are akin to "standby" agreements as described by the LME. In some instances, "an external stakeholder demands that the metal owner utilises LME storage." (Report at 30.) For example a bank providing metals finance may demand that the underlying metal is backed by an LME warrant.... In this respect, some financing providers are satisfied by a 'standby' agreement, whereby financed metal is held off-LME (hence benefitting from lower rent levels), but with a guarantee from an LME-licensed warehouse that the metal can be warranted on-demand...." (*Id.* at 30.) In this way, a third-party financing institution would be able to derive comfort that, on a borrower default, the institution would be able to deliver in a warrant against an LME hedge or otherwise have a readily realisable asset. While Metro has no visibility on the actual financing arrangements of its customers, the fact that Metro offers customers an option for future warranting at agreed terms is wholly consistent with industry practice.

Against this backdrop of market dynamics, industry practice and the "competitive metal ecosystem" that "the warehouses are a part of" (Report at 38), Metro believes it has complied with Clause 9.3.1 of the Warehouse Agreement.

In your answer, please specifically respond to the following considerations

(a) Does Metro consider that the incentives it offered contributed to the perpetuation of metal queues in Detroit? If not, please explain why.

Response: No. From a market perspective, Metro believes that it does not make a difference whether a new LME warrant is created from primary metal or from metal that has previously been warranted on the LME. In both instances, metal is added to the LME system for trading on the exchange. Likewise, the payment of incentives in the context of off-warrant deals is similar to incentive payments for primary metal. In both cases, the metal owner or customer has various options, including but not limited to a sale to a physical user, storage in a non-LME approved warehouse, self-storage, or a sale on the LME. If the metal owner decides to sell on the LME, it will warrant the metal with an LME warehouse operator who may offer an incentive. As noted by the LME, it is "common practice for warehouse operators to offer incentives to metal owners to attract load-in of metals." (Report at 32.) Some warehouses also pay incentives by discounting future rent and by having metal owners commit to fixed periods of storage, resulting in the removal of these warrants from the pool of "free warrants." As the LME has also recognized, the "practice of warehouse operators paying incentives do[es] not appear to cause an economically-irrational market in that normal economic principles of competition continue to apply." (Report at 34.) Furthermore, the actual length of the queue is not determined by overall inventory levels, but rather by the number of warrant cancellations in one specific location. Metro has no influence over warrant cancellations. As such, the actual queue length is not considered in Metro's economic analysis.

(b) Is it not the case that the incentives you offered resulted in metal being re-warranted, when it is likely that such metal may otherwise have remained outside of the LME system?

Response: Metro does not believe that the incentives it offered for the Transactions - which, as explained above, were largely identical to other incentives - constituted "exceptional inducements" under Clause 9.3.1 of the Warehouse Agreement. As the LME has recognized, "[a]t the core of the economic system is the choice faced by [metal owners] holding free metal in the market." (Report at 37.) These options may include selling metal to a physical user, storing and financing metal off LME, or warranting metal on the LME. (*Id.* at 37-38.) As the LME has explained, a metal owner's choice between LME and non-LME storage is a "trade-off between quality (with the LME storage being higher quality, given the requirements imposed by the LME on providers of LME storage) and cost (with LME storage being more expensive, given the cost of providing the incremental level of service). (*Id.* at 30.) In fact, with respect to the Transaction involving Red Kite, the customer decided not to re-warrant certain metal and instead paid a break-fee, which included a reimbursement for the pre-paid incentive. Whether a customer decides that its metal should remain outside of the LME system, including the circumstances in which it may or may not wish to have metal re-warranted, or indeed for new metal to be warranted, is a question that the customer decides on its own based on its commercial requirements, market dynamics and a host of other reasons of which Metro would not be aware.

(c) Are the incentives for these deals in line with those normally paid by Metro, both in Detroit and at its other warehouse locations? Please provide comparative figures of the average total value of incentive packages:

- **for these deals specifically;**
- **for Metro warehouse operations relating to primary aluminium in Detroit as a whole; and**
- **for Metro warehouse operations relating to primary aluminium in at least two other warehouse locations.**

These figures should cover approximately the same time periods. Please provide appropriate supporting documentation.

Response: The Transactions were agreed to in November 2012 (Red Kite) and February 2013/April 2013 (Glencore). The estimated total incentive equivalent agreed to on those deals range for the majority of metal from $202/mt (includes value of free rent of $4.02/mt) to $203.89/mt (includes value of rent discount of $7.89/mt). Incentives paid for primary aluminium in Detroit in this time period are in line with those offered by Metro to re-warrant metal as part of the Transactions. By way of example, Metro offered the following incentives for warehousing aluminium in Detroit:

- On 14 December 2012 and on 14 January 2013, Metro warranted 3,375mt and 6,675mt, respectively, of primary aluminium with an incentive of $199.22/mt (includes value of free rent of $3.72/mt).
- On 17 December 2012, Metro warranted 1,025mt of primary aluminium with an incentive of $209.26/mt (includes value of free rent of $1.26/mt).
- On 18 February 2013 and on 18 March 2013, Metro warranted 7,375mt and 2,600mt, respectively, of primary aluminium with an incentive of $200.30/mt (includes value of free rent of $4.21/mt).
- On 25 March 2013 and on 13 May 2013, Metro warranted 4,675mt and 5,275mt, respectively, of primary aluminium with an incentive of $199.96/mt (includes value of free rent of $4.21/mt).
- And on 14 June 2013, Metro warranted 8,300mt of primary aluminium with an incentive of $200.60/mt (includes value of free rent of $3.60/t).

Please note that because Metro had no primary aluminium inbound into other locations during the relevant time period, it is unable to provide a comparison across locations.

(d) Please provide details, for each of the categories of incentives set out in (c) above, as to whether the inducements were standardised and published, or whether they were offered and paid on an *ad-hoc* basis, e.g. to certain customers at certain locations only.

Response: Consistent with industry practice, Metro negotiates on an individual basis the terms of incentives with its highly sophisticated customers whose options could change in light of evolving market conditions, and the details thus varied from transaction to transaction.

(e) What level of visibility or understanding does Metro have of the incentives offered and paid by other warehouse companies in Detroit, and elsewhere? Please provide details. How does Metro consider the incentives offered in these particular deals to compare to the incentives rival warehouse operations were, would have and/or are offering? Please provide supporting documentation if you are able.

Response: Metro has no visibility or specific information relating to the incentives offered by other warehouse companies in Detroit or elsewhere. As mentioned in our letter of 27 January 2014, Metro offers inducements to attract metal into its warehouses consistent with market practice in a highly competitive environment in which Metro competes with other LME and non-LME storage options. To the extent that Metro was able to sometimes (but not always) attract metal into its warehouses, Metro believes that its incentives were in line with inducements offered by other market participants and economic parameters in the market at such times.

(f) Please set out the basis upon which the total incentive packages offered in these deals were calculated (including, for instance, calculation of incentives by reference to the rent that could be earned on re-warranted metal given the length of the current queue). Include any supporting documentation. To the extent not covered in your further response relating to Question 7 (see above), please set out at what level within Metro the incentive packages were formulated and signed off.

Response: A warehouse operator may evaluate transactions and incentives it can offer based on a variety of factors, including revenues, costs and competition in the market. Metro does not know who owns the warrants covering the metal in its warehouses at any specific point in time or whether and when warrants will be cancelled. In evaluating incentives to re-warrant metal in Detroit, Metro's economic analysis is based, among other things (such as general economic circumstances, future costs and investments to maintain its warehouse capacity, and possible regulatory changes), on a "wind down scenario," *i.e.*, Metro assumes that all metal will be loaded out at the required minimum load-out rate until all inventory has been shipped out, and it estimates associated revenues in such a total liquidation scenario, irrespective of outstanding cancellations. Metro then evaluates how much additional revenue would be generated from a customer's decision to warrant additional metal. Because Metro assumed that all metal will be loaded out as quickly as possible, like Metro's analysis for warranting primary aluminium, the length of any existing queue in Detroit was not a factor in its assessment of the Transactions and the incentives it could offer.

(g) Does Metro consider that it had a strong bargaining position compared to Glencore and Red Kite in relation to these deals? If not, please explain why. What is Metro's understanding of the other options that were available to Glencore/Red Kite in terms of off-warrant or on-warrant storage of this metal, and does it consider such competition to be likely to have been competitively priced against Metro's offer (including incentives)?

Response: As described in the LME Report and explained above, metal owners have a number of choices, and warehouses - both LME-approved and non-LME-approved warehouses - compete with each other to provide warehouse services. In fact, an industry researcher, Wood Mackenzie, estimates that about 8.4 of the 13.9 million metric tons of aluminum in storage are stored off-warrant. As such, buyers of warehouse services enjoy a strong bargaining position.

The LME has also recognized the "expertise" of highly sophisticated metal owners, like Glencore and Red Kite, "who have built up strong modelling capabilities around premiums and queues."

(Report at 29.) In its negotiations with Glencore and Red Kite regarding the Transactions, Metro offered incentives to attract metal into its warehouses and competed with other storage options available to them. Indeed, as recognized by the LME, the metal owner "will always follow the route which yields the highest price for the free metal," (*Id.* at 38), and thus "economic theory suggests" that the prices of competing options "must be in balance" (*Id.* at 38). As such, Metro does not believe that warehouses can be considered as having overly strong bargaining power relative to metal owners.

Question: Follow-up question on stock records

Please confirm whether Metro complied with Clause 6.3.2 of the Warehouse Agreement (which states: "*Until such time as stocks of metal are reported pursuant to LMEsword alone, metal taken off Warrant, but which is still on the Warehouse's premises, must be combined on the stock return with those stocks actually on Warrant rounded to the nearest complete Warrant lot and also separately identified on the return, or shown in such other manner as prescribed by the Exchange by notice. If no stocks are held, a nil return must be submitted on each Business Day*".)

If yes, please highlight specific entries in, and cross-reference to, appropriate stock reports to explicitly demonstrate this compliance.

Response: Metro believes that it has complied fully with Clause 6.3.2 of the Warehouse Agreement with respect to the Transactions. We refer you to our response to "Question: Your response to our Question 2" for an explanation as to why it was appropriate for Metro to remove from the stock report the metal that was loaded FOT at the owner's instruction and for which a bill of lading was issued.

Collated list of clarifications needed

In addition to implementing the list of required clarifications below, please provide such further written explanations as are necessary to fully answer the questions posed above.

1. Combine and re-present the material in Appendix A and Appendix B into one comprehensive document, to the extent possible. The revised document should cover, as a minimum, points 2 to 7 below.

2. Make clear both the offers of incentives made to customers, and the incentives that were actually paid.

3. Make clear whether metal moved from one location to another in each case. In the revised document, please reflect each shipment of metal from one address to another on separate rows.

4. Include all incentives offered and paid, in whatever form, in the revised document.

5. Detail the timings of: offers of incentives, acceptances of incentives, and payments of incentives.

6. Detail the persons involved in brokering the deals and related incentives. Distinguish between persons negotiating the deals and persons making and receiving the payments, if different.

7. Provide clear cross-referencing to supporting documentation for all of the above.

Response: We have provided the requested information, to the extent available, in our responses above and in the attachments hereto.

We hope that this letter and the attached materials address the LME's enquiries and reiterate the offer that we have made to discuss your enquiries further in person.

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Please be advised that the information and spreadsheets provided herein did not previously exist in the form requested, and their compilation required the application of technical and manual processes in order to collect and present the requested information. While we believe the spreadsheets are reasonably accurate and complete, we cannot make an absolute representation that they are or that there were not inadvertent errors in their preparation. We will provide any corrections if we discover missing information or errors.

Pursuant to Clauses 7.3.3 and/or 9.3.3 of the Warehouse Agreement, Metro requests confidential treatment of the attached materials on the ground that disclosure of such material would reveal trade secrets or confidential commercial or financial information of Metro or its affiliates, or protected personal information. Furthermore, the disclosure of the attached materials may not only violate Metro's or its affiliates' proprietary rights, but may also grant competitors an unfair competitive advantage or compromise competitive advantages possessed by Metro and its affiliates, and prejudice Metro's commercial interests. Metro considers that the attached materials are therefore exempt from disclosure pursuant to, *inter alia*, section 43 of the Freedom of Information Act 2000. Metro also requests that this letter requesting confidential treatment not be disclosed for the aforementioned reasons.

Should the LME wish to publicly release the attached materials or information contained in this letter, or be requested to do so pursuant to the Freedom of Information Act 2000 or otherwise, Metro respectfully requests reasonable notice of its intent to do so, or of any such request, and the opportunity to make representations and to object to such a release or the provision of information pursuant to such a request.

Please contact Jonathan Melrose at 0207 825 4514 with any questions.

Yours faithfully,

Simmons & Simmons LLP