EXHIBIT C

EXPLANATION AND ANALYSIS OF THE CONTRACTS' COMPLIANCE WITH APPLICABLE CORE PRINCIPLES AND COMMISSION REGULATIONS

As required by Commodity Futures Trading Commission ("Commission") Regulation 40.2(a), the following analysis, in narrative form, demonstrates that CDS Index Contract – North America Investment Grade 10Y Swaps and Swaptions (the "Contract") is consistent with the requirements of the Commodity Exchange Act, as amended (the "Act"), and the Commission regulations and guidance thereunder (in particular, Appendix B to Part 37 and Appendix C to Part 38).

Appendix B to Part 37

CORE PRINCIPLE 3 OF SECTION 5H OF THE ACT—SWAPS NOT READILY SUSCEPTIBLE TO MANIPULATION; CORE PRINCIPLE 4 OF SECTION 5H OF THE ACT—MONITORING OF TRADING AND TRADE PROCESSING

The swap execution facility shall permit trading only in swaps that are not readily susceptible to manipulation.

(a) Guidance.

(1) In general, a swap contract is an agreement to exchange a series of cash flows over a period of time based on some reference price, which could be a single price, such as an absolute level or a differential, or a price index calculated based on multiple observations. Moreover, such a reference price may be reported by the swap execution facility itself or by an independent third party. When listing a swap for trading, a swap execution facility shall ensure a swap's compliance with Core Principle 3, paying special attention to the reference price used to determine the cash flow exchanges. Specifically, Core Principle 3 requires that the reference price used by a swap not be readily susceptible to manipulation. As a result, when identifying a reference price, a swap execution facility should either: Calculate its own reference price using suitable and well-established acceptable methods or carefully select a reliable third-party index.

(2) The importance of the reference price's suitability for a given swap is similar to that of the final settlement price for a cash-settled futures contract. If the final settlement price is manipulated, then the futures contract does not serve its intended price discovery and risk management functions. Similarly, inappropriate reference prices cause the cash flows between the buyer and seller to differ from the proper amounts, thus benefitting one party and disadvantaging the other. Thus, careful consideration should be given to the potential for manipulation or distortion of the reference price.

Reference Index: CDX.NA.IG

The reference index used to determine the exchange of cash flows for the Contract is Markit Group Limited's ("Markit's") "North American Investment Grade CDX Index" or the CDX.NA.IG Index (Series 8 to Current) (the "IG Index"). This well-established index tracks the one hundred twenty-five (125) most liquid North American corporate, municipal and sovereign debt bonds and/or loans, with investment grade credit ratings. The IG Index is based on comprehensive, well-established and transparent rules that outline, among other things, the selection of index constituents ("Reference Entities"), the selection of the constituents' loans or bonds ("Reference Obligations"), and the removal / addition of entities to the index.

Secretary of the Commission October 30, 2014 Page 7 The IG Index is widely accepted by market participants as a reliable index.¹

Selection of Reference Entities

Markit constructs the list of Reference Entities in accordance with methodologies outlined in its rules (i.e., the "Index Roll Process"). As part of this process, Markit creates a Liquidity List based on the semiannual report published by DTCC, entitled "6 Month Analysis Top 1,000 Single Names."² One of the factors considered in determining which entities are added to the list is the long-term credit rating assigned to such entity by select rating agencies (or if that information is not available, the long-term credit rating assigned by select rating agencies to the entity's associated Reference Obligation).³

Markit's process for generating the list of Reference Entities has several other well-defined, thoroughlydocumented steps, including: (a) determining which entities must be removed from the existing IG Index; (b) determining which new entities should be added to the preliminary index; (c) removing the entities that have the lowest ranking in the IG Liquidity Rankings (if, after the processes described in (a) and (b), the number of entities on the index exceeds 125); (d) adding appropriate entities to the preliminary index (if, after the processes described in (a) and (b), the number of entities on the index is less than 125); (e) publicly disseminating a provisional list of Reference Entities for comment (no later than seven (7) days prior to the "Roll Date" (described below)); (f) engaging in a final review of the constituent list; and (g) publishing the final IG Index on the Roll Date.⁴

Selection of Reference Obligations

After the IG Index list has been finalized, typically, Markit identifies a single Reference Obligation for each entity, senior in priority of payment, based on data in its Reference Entity Database ("RED").⁵

Reference Index is Not Readily Susceptible to Manipulation

The IG Index is not readily susceptible to manipulation. First, as noted above, it is a broad index – containing 125 entities. Second, all of the entities have equal or approximately equal weightings, so that no entity disproportionately dominates the weighting of the index.⁶ Third, as noted above, the IG Index is a highly liquid index as it is comprised of the 125 most liquid North American corporate, municipal and sovereign debt bonds and/or loans, with investment grade credit ratings. And last, as noted above, the development and management of the IG Index is rules-based, therefore making it difficult for individuals or entities to change selection practices for purposes of manipulation.

(3) For swaps that are settled by physical delivery or by cash settlement refer to the guidance in Appendix C to Part 38 of this chapter—Demonstration of Compliance that a Contract is not Readily Susceptible to Manipulation, section b(2) and section c(4), respectively.

Please see below.

¹ Comprehensive descriptions of Markit's administration of the IG Index are found in "Markit CDX High Yield & Markit CDX Investment Grade Index Rules (March 2013)" ("Markit Rules"), and "Markit Credit Indices: A Primer (November 2008)" ("Markit Primer"). ² "Markit Rules," at 10.

 $^{^{3}}$ *Id.* at 14.

⁴ Id. at 10-13. ⁵ *Id.* at 14

⁶ *Id*. at 6.

Secretary of the Commission October 30, 2014 Page 8 <u>Appendix C to Part 38 - Demonstration of Compliance That a Contract Is Not Readily</u> Susceptible to Manipulation

(c) Futures Contracts Settled by Cash Settlement. (1) Cash settlement is a method of settling certain futures or option contracts whereby, at contract expiration, the contract is settled by cash payment in lieu of physical delivery of the commodity or instrument underlying the contract. An acceptable specification of the cash settlement price for commodity futures and option contracts would include rules that fully describe the essential economic characteristics of the underlying commodity (e.g., grade, quality, weight, class, growth, issuer, maturity, source, rating, description of the underlying index and index's calculation methodology, etc.), as well as how the final settlement price is calculated. In addition, the rules should clearly specify the trading months and hours of trading, the last trading day, contract size, minimum price change (tick size) and any limitations on price movements (e.g., price limits or trading halts).

Essential Economic Characteristics of the Contract Terms

The terms and conditions of the Contract match the terms of the 10Y North American Investment Grade CDS Index contracts that are commonly offered in the market and are listed in Exhibit B.

Some terms of the Contract are fixed (*i.e.*, currency and tenor), while other terms are flexible and determined by the counterparties (*i.e.*, effective date and maturity date). This combination of standard and flexible terms allows the contract to have a basic consistent form, while allowing counterparties to tailor some aspects of the Contract to their economic needs. This structure follows industry convention; the terms of the Contract match the terms of credit default swaps and swaptions that are commonly offered in the market.

Calculation of Cash Settlement Price

The cash settlement process for the Contract includes the following payments:

- Fixed Quarterly Cash Payments These payments are reflected in basis points and paid by the protection buyer to the protection seller.
- Upfront Fee Payment -This fee is a portion of the payments, which is expressed in percentage points of the notional. The fee is present valued and paid immediately to the seller.
- Contingent Payment If there is a credit event (bankruptcy or failure to pay), payments related to the credit event settlement will be determined pursuant to the 2009 ISDA Credit Derivatives Determination Committees and Auction Settlement Supplement (*i.e.*, the Big Bang Protocol).

This cash settlement method for credit default swaps is often used for credit default swaps and thus widely accepted by market participants.

(2) Cash settled contracts may be susceptible to manipulation or price distortion. In evaluating the susceptibility of a cash-settled contract to manipulation, a designated contract market should consider the size and liquidity of the cash market that underlies the listed contract in a manner that follows the determination of deliverable supply as noted above in (b)(1). In particular, situations susceptible to manipulation include those in which the volume of cash market transactions and/or the number of participants contacted in determining the cash-settlement price are very low. Cash-settled contracts may create an incentive to manipulate or artificially influence the data from which

the cash-settlement price is derived or to exert undue influence on the cash-settlement price's computation in order to profit on a futures position in that commodity. The utility of a cash-settled contract for risk management and price discovery would be significantly impaired if the cash settlement price is not a reliable or robust indicator of the value of the underlying commodity or instrument. Accordingly, careful consideration should be given to the potential for manipulation or distortion of the cash settlement price, as well as the reliability of that price as an indicator of cash market values. Appropriate consideration also should be given to the commercial acceptability, public availability, and timeliness of the price series that is used to calculate the cash settlement price. Documentation demonstrating that the settlement price index is a reliable indicator of market values and conditions and is commonly used as a reference index by industry/market agents should be provided. Such documentation may take on various forms, including carefully documented interview results with knowledgeable agents.

The Contract is not readily susceptible to manipulation for a number of reasons. First, the underlying market for the Contract has considerable depth and liquidity, making manipulation very difficult to achieve. The IG Index is used by numerous market participants, and basing credit default swaps and swaptions on the IG Index has been a longstanding, widely accepted practice. Second, as noted above, the method for calculating the cash settlement price – involving upfront fee payments, fixed quarterly cash payments, and (in the case of a credit event) a contingent payment – is widely used and generally accepted by market participants. Finally, tpSEF Inc. ("tpSEF") has a robust market surveillance program that is effectively able to surveil this market, detect uncommon activity, and investigate any such activity for signs of manipulation (note that the foregoing also demonstrates compliance with Core Principle 4).

(3) Where an independent, private-sector third party calculates the cash settlement price series, a designated contract market should consider the need for a licensing agreement that will ensure the designated contract market's rights to the use of the price series to settle the listed contract.

(i) Where an independent, private-sector third party calculates the cash settlement price series, the designated contract market should verify that the third party utilizes business practices that minimize the opportunity or incentive to manipulate the cash-settlement price series. Such safeguards may include lock-downs, prohibitions against derivatives trading by employees, or public dissemination of the names of sources and the price quotes they provide. Because a cash-settled contract may create an incentive to manipulate or artificially influence the underlying market from which the cash-settlement price is derived or to exert undue influence on the cash-settlement computation in order to profit on a futures position in that commodity, a designated contract market should, whenever practicable, enter into an information-sharing agreement with the third-party provider which would enable the designated contract market to better detect and prevent manipulative behavior.

Please see above regarding the calculation of the cash settlement price.

(ii) Where a designated contract market itself generates the cash settlement price series, the designated contract market should establish calculation procedures that safeguard against potential attempts to artificially influence the price. For example, if the cash settlement price is derived by the designated contract market based on a survey of cash market sources, the designated contract market should maintain a list of such entities which all should be reputable sources with knowledge of the cash market. In addition, the sample of sources polled should be representative of the cash market, and the poll should be conducted at a time when trading in the cash market is active.

Please see above regarding the calculation of the cash settlement price.

(iii) The cash-settlement calculation should involve computational procedures that eliminate or reduce the impact of potentially unrepresentative data.

(iv) The cash settlement price should be an accurate and reliable indicator of prices in the underlying cash market. The cash settlement price also should be acceptable to commercial users of the commodity contract. The registered entity should fully document that the settlement price is accurate, reliable, highly regarded by industry/market agents, and fully reflects the economic and commercial conditions of the relevant designated contract market.

Please see above regarding the availability, reliability and widespread acceptance of the method used to generate the cash settlement price.

(v) To the extent possible, the cash settlement price should be based on cash price series that are publicly available and available on a timely basis for purposes of calculating the cash settlement price at the expiration of a commodity contract. A designated contract market should make the final cash settlement price and any other supporting information that is appropriate for release to the public, available to the public when cash settlement is accomplished by the derivatives clearing organization. If the cash settlement price is based on cash prices that are obtained from non-public sources (e.g., cash market surveys conducted by the designated contract market or by third parties on behalf of the designated contract market), a designated contract market should make available to the public as soon as possible after a contract month's expiration the final cash settlement price as well as any other supporting information that is appropriate or feasible to make available to the public.

Information on the IG Index is available on Markit.com.

(4) Contract terms and conditions requirements for futures contracts settled by cash settlement.

(i) An acceptable specification of the terms and conditions of a cash-settled commodity contract will also set forth the trading months, last trading day, contract size, minimum price change (tick size) and daily price limits, if any.

The terms and conditions of the Contract include the essential economic terms of the Contract. Also as noted in the attached, the counterparties will begin calculating accrued obligations from the effective date to the maturity date (*i.e.*, "last trading day") of each contract – dates which are set by the counterparties.

(A) *Commodity Characteristics*: The terms and conditions of a commodity contract should describe the commodity underlying the contract.

The terms and conditions of the Contract note that the Contract is based on the basket of liquid North America based entities with investment grade rating that comprise the CDX.NA.IG (Series 8 to Current).

(B) *Contract Size and Trading Unit*: An acceptable specification of the trading unit would be a contract size that is consistent with customary transactions in the cash market. A designated contract market may opt to set the contract size smaller than that of standard cash market transactions.

The size of the Contract is consistent with customary transactions in the market.

(C) *Cash Settlement Procedure*: The cash settlement price should be reliable, acceptable, publicly available, and reported in a timely manner as described in paragraphs (c)(3)(iv) and (c)(3)(v) of this appendix C.

The cash settlement procedure and an explanation of how it is reliable, acceptable, publicly available, and reported in a timely manner appears above.

(D) *Pricing Basis and Minimum Price Fluctuation (Minimum Tick)*: The minimum price increment (tick) should be set a level that is equal to, or less than, the minimum price increment commonly observed in cash market transactions for the underlying commodity. Specifying a futures' minimum tick that is greater than the minimum price increment in the cash market can undermine the risk management utility of the futures contract by preventing hedgers from efficiently establishing and liquidating futures positions that are used to hedge anticipated cash market transactions or cash market positions.

As agreed between counterparties.

(E) *Maximum Price Fluctuation Limits*: Designated contract markets may adopt price limits to: (1) Reduce or constrain price movements in a trading day that may not be reflective of true market conditions but might be caused by traders overreacting to news; (2) Allow additional time for the collection of margins in times of large price movements; and (3) Provide a "cooling-off" period for futures market participants to respond to bona fide changes in market supply and demand fundamentals that would lead to large cash and futures price changes. If price-limit provisions are adopted, the limits should be set at levels that are not overly restrictive in relation to price movements in the cash market for the commodity underlying the futures contract. For broad-based stock index futures contracts, rules should be adopted that coordinate with New York Stock Exchange ("NYSE") declared Circuit Breaker Trading Halts (or other market coordinated Circuit Breaker mechanism) and would recommence trading in the futures contract only after trading in the majority of the stocks underlying the index has recommenced.

As agreed between counterparties.

(F) *Last Trading Day*: Specification of the last trading day for expiring contracts should be established such that it occurs before publication of the underlying third-party price index or determination of the final settlement price. If the designated contract market chooses to allow trading to occur through the determination of the final settlement price, then the designated contract market should show that futures trading would not distort the final settlement price calculation.

The last trading day is the maturity date of the contract, in the case of credit default swaps, or its expiration date, in the case of swaptions, which is set by the counterparties.

(G) *Trading Months*: Trading months should be established based on the risk management needs of commercial entities as well as the availability of price and other data needed to calculate the cash settlement price in the specified months. Specification of the last trading day should take into consideration whether the volume of transactions underlying the cash settlement price would be unduly limited by occurrence of holidays or traditional holiday periods in the cash market. Moreover, a contract should not be listed past the date for which the designated contract market has access to use a proprietary price index for cash settlement.

If there is no credit event, the protection buyer will pay the protection seller fixed quarterly cash payments on the credit default swaps. Prior to exercise into credit default swaps, there are no ongoing payments on the swaptions.

(H) *Speculative Limits*: Specific rules and policies for speculative position limits are set forth in part 150 and/or part 151, as applicable, of the Commission's regulations.

None required by Parts 150 or 151.

(I) Reportable Levels: Refer to § 15.03 of the Commission's regulations.

tpSEF will adhere to the applicable reporting levels set forth in § 15.03 of the Commission's regulations.

(J) Trading Hours: Should be set by the designated contract market to delineate each trading day.

The Contract is traded twenty-three hours a day from Sunday to Friday Eastern Time. The Contract is not traded between 5:30 p.m. and 6:30 p.m. Eastern Time.