

Matthew R. Bernier Senior Counsel Duke Energy Florida, Inc.

August 4, 2015

VIA ELECTRONIC FILING

Ms. Carlotta Stauffer, Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: Fuel and purchased power cost recovery clause with generating performance incentive factor; Docket No. 150001-EI

Dear Ms. Stauffer:

Please find enclosed for electronic filing on behalf of Duke Energy Florida, Inc. ("DEF"), DEF's redacted 2016 Risk Management Plan for Fuel Procurement.

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1428 should you have any questions concerning this filing.

Respectfully,

s/Matthew R. Bernier

Matthew R. Bernier Senior Counsel <u>Matthew.Bernier@duke-energy.com</u>

MRB/mw Enclosures

Duke Energy Florida, Inc. Docket No.: 150001 CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail this 4th day of August, 2015 to all parties of record as indicated below.

s/Matthew R. Bernier

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Duke Energy Florida, Inc. Risk Management Plan for Fuel Procurement and Wholesale Power Purchases For 2016

Duke Energy Florida, Inc. (DEF) is submitting its 2016 Risk Management Plan for review by the Florida Public Service Commission. The Risk Management Plan includes the required items as outlined in Attachment A of Order No. PSC-02-1484-FOF-EI and specifically items 1 through 9, and items 13 through 15 as set forth in Exhibit TFB-4 to the prefiled testimony of Todd F. Bohrmann in Docket No. 011605-EI and further clarified in Order No. PSC-08-0667-PAA-EI of Docket No. 080001-EI.

Several groups play key roles in the management, monitoring, and execution of the activities outlined in DEF's Risk Management Plan. These groups include Fuels and System Optimization (FSO), Global Risk Management (GRM), which includes Enterprise and Regulated Risk Management, Regulated Accounting, Internal Audit, Legal, and Information Technology. The activities supported by these groups include the following: procuring competitively priced fuel, performing active asset optimization and portfolio management, executing DEF's approved hedging strategy, monitoring and reporting against established oversight limits for credit and margin limits, performing credit evaluations and monitoring credit and default exposure, performing deal validation, volume actualization, preparing and reviewing transactions and contracts, preparing journal entries to account for fuel and power related activities, performing billing and payments under the various fuel and purchased power contracts, performing audits, and maintaining and supporting needed systems to capture, track, and account for these activities.

Based on the July 2015 Fuels and Operations Forecast (FOF), DEF's estimated fuel consumption and economy transaction projections for 2016 are as follows:

<u>Coal</u>

Based on current projections, DEF forecasts to burn approximately tons of coal in 2016. DEF's forecasted coal requirements for 2016 will primarily be purchased under term coal supply agreements. The coal supply will be delivered to DEF's plants via railroad and barge transportation agreements. Spot purchases will be made as needed to supplement the term purchases.

Light Oil

Based on current projections, DEF forecasts to burn approximately barrels of light oil in 2016. DEF's forecasted light fuel oil requirements for 2016 are expected to be purchased primarily under term supply

agreements with volume flexibility at indexed market prices. Spot market purchases will be made as needed to supplement term purchases.

Natural Gas

Based on current projections, DEF forecasts to burn approximately of natural gas in 2016, comprised of approximately at DEF's generating plants and statement of a gas-tolling purchased power facilities where DEF has the responsibility to provide the natural gas. DEF's forecasted natural gas requirements for 2016 are expected to be purchased primarily under term supply agreements based on market index pricing, with supplemental seasonal, monthly and daily purchases of natural gas being made as needed.

Economy Power Purchases and Sales

Based on current projections, DEF forecasts to purchase approximately of economy power and sell approximately of economy power in 2016. DEF actively seeks to purchase and sell economy power as opportunities arise based on market prices, dispatch costs, and available transmission capacity.

Item 1. Identify the company's overall quantitative and qualitative Risk Management Plan Objectives.

DEF's identified 2016 Risk Management Plan Objectives are to effectively manage its overall fuel and purchased power costs for its customers by engaging in competitive fuel procurement practices and activities, performing active asset optimization and portfolio management activities, and continuing to execute the Company's hedging program to reduce price risk and volatility, and provide greater fuel cost certainty for DEF's customers. These items are discussed further in Item 8.

Item 2. <u>Identify the minimum quantity of fuel to be hedged and the</u> <u>activities to be executed for the balance of 2015 and 2016.</u>

DEF utilizes a phased hedging program where financial hedge transactions are executed over time with the objectives of reducing price risk and volatility and providing greater fuel cost certainty for DEF's customers. The financial hedging program outlined in this 2016 Risk Management Plan includes executing approved financial agreements over time for natural gas and light fuel oil river barge exposures. Natural gas hedging activity represents the largest component of DEF's hedging program as natural gas represents the largest fuel cost component of DEF's overall generation fuel costs.

The volumes hedged over time for natural gas represent a portion of DEF's forecasted burns with higher hedging target ranges in the near term and lower hedging target ranges in the outer period. The hedge percentage target ranges outlined provide a framework for consistently executing the layered hedging strategy over time. DEF currently uses two types of financial transactions to hedge which are swaps and costless collars. DEF cannot predict future prices and DEF's hedging program does not involve speculation or trying to "out-guess" the market. All hedges are executed at the prevailing market price for any given period that exists at the time the hedging transactions are executed. The results of hedging activities may or may not result in net fuel cost savings due to differences between the monthly settlement prices and the actual hedge price of the transactions that were executed over time. The volumes hedged for each fuel type over time are based on periodic updated fuel forecasts and the actual hedge percentages for any month, rolling period, or calendar annual period may come in higher or lower than the target minimum hedge percentages and hedging ranges because of actual fuel burns versus forecasted fuel burns. Actual burns can deviate from forecasted burns because of dynamic variables such as weather, unforeseen unit outages, actual load, and changing fuel prices. DEF's multi-year approach to executing fixed price transactions over time is a reasonable and prudent approach to reduce price risk and volatility and provide greater fuel cost certainty for DEF's customers.

Outlined below for each fuel type and exposure are the targeted minimum hedge percentages to be hedged during the remainder of 2015 and during 2016:

Natural Gas

Natural gas represents DEF's largest fuel cost component and represents the largest component of DEF's hedging activities. DEF plans to continue to execute its existing phased financial hedging program over a rolling 36-month time period through time for natural gas through the remainder of 2015 and during 2016. The currently approved rolling hedge percentage that are outlined in DEF's Regulated Utilities Risk Limits as follows:

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DEF will target to hedge a minimum of **Mark**, **Mark** and **Mark** of forecasted natural gas burns for the rolling 36-month time period through time, respectively, during the remainder of 2015 and 2016. Given DEF's hedging strategy, DEF will continue to participate in the spot natural gas market for a portion of its estimated natural gas needs.

Fuel Oil and Transportation Fuel Surcharges

Given the reduction in overall fuel oil usage in its generation fleet, DEF will no longer execute financial hedge transactions for periods after 2015.

During the balance of 2015 and during 2016, with respect to 2016 coal river transportation estimated fuel surcharge exposure, DEF will target to hedge between **to find** of the estimated fuel surcharge exposure.

With respect to coal rail transportation estimated fuel surcharge exposures for 2016, given the reduction in expected rail shipments DEF will no longer execute financial hedge transactions for periods after 2015.

Summary

Through the remainder of 2015 and during 2016, DEF will continue to monitor its fuel forecast and will continue to execute hedges over time to attempt to manage to the hedge percentage targets outlined for a portion of its projected burns for natural gas, light oil, and estimated coal rail and river transportation fuel surcharge exposure, with the exceptions discussed above. This hedging approach is consistent with DEF's existing strategy and allows DEF to continue to monitor the market and fuel forecast updates. The hedging targets for each of the respective periods are included in DEF's Regulated Utilities Risk Limits in **Attachment A**.

Item 3. <u>Identify and quantify each risk, general and specific, that the</u> <u>utility may encounter with its fuel procurement.</u>

DEF has identified specific and general risks associated with the procurement of fuels and power optimization activities. The specific risks include fuel price risk, supplier performance and default risk, liquidity risk, credit risk, product availability risk, and changes in forecasted volumes. The general risks include weather related events such as hurricanes, extreme weather variations from forecast, business continuity, and changes in environmental rules and regulations. Described below is further information on the specific and general risks, and DEF's activities to manage overall exposure to these risks including the processes that DEF has in place to monitor and quantify risks.

Fuel Price Risk

Commodity prices are constantly changing and as a result by definition contain volatility. DEF's customers are exposed to the risk of fuel price movements over time which could result in significant variability in projected and actual fuel costs. As noted in Item 2 above, natural gas makes up the largest component of DEF's overall fuel costs and hedging activities. For

natural gas the physical fuel is procured under standard industry contracts that are based on published market index pricing that exists during the time period the fuel is delivered. The published market index prices paid by DEF for natural gas will fluctuate with changes in market prices until the respective first of the month market index or daily-published market index price settles and the product is delivered. As a result of fuel cost risks and volatility, DEF has implemented an approved financial hedging plan to reduce the risk of future price movements for a percentage of its fuel exposure for natural gas and coal river barge transportation fuel surcharges by executing financial hedging transactions over time that lock in prices. By definition, fixed prices are no longer subject to future price movement and as a result volatility and fuel cost risks are reduced. With respect to coal, DEF executes standard industry physical supply agreements to fix and/or collar the price of the underlying coal but is exposed to fuel surcharges in the transportation agreements. Absent hedging as defined by Order No. PSC-02-1484-FOF-EI (i.e. the Hedging Order), Order No. PSC-08-0667-PAA-EI (i.e. Clarifying Hedging Order), and Order No. PSC-09-0349-CO-EI (i.e. Transportation Surcharges Order), and fixed price coal supply contracts, the projected fuel costs for coal and natural gas could vary significantly due to changing market prices over time.

DEF will manage and reduce fuel price risk and volatility for a portion of its forecasted natural gas and estimated coal river transportation fuel surcharges by utilizing financial transactions over time as outlined above for natural gas and coal river transportation fuel surcharges. In addition, as outlined above, DEF enters into standard industry coal supply physical agreements to fix the price of the underlying commodity exposure. As a result of these actions, DEF reduces its overall risk to changing prices in projected fuel costs for its customers over time.

With respect to monitoring and quantifying fuel price risk, the company's Risk Management function independently monitors and reports on the financial hedging activities and the percentage of projected fuel burns that have been procured as compared to the established procurement targets for each respective product and period. In addition, the Company performs multiple periodic fuel and purchased power cost forecast updates each year, which incorporate any updates needed for hedge positions, fuel and emission prices, unit maintenance schedules, load forecasts, and other operating parameters. The updated fuel and purchased power forecasts are point in time estimates and are summarized and published to ensure there is a regular review of projected fuel and purchased power costs. In addition, the Company performs standard statistical stress tests and portfolio analyses on an as needed basis.

Supplier Performance and Default Risk

Supplier performance and default risk represents the risk of additional cost and/or supply loss that DEF could incur if a supplier defaults on a physical or financial obligation and is not able to fulfill the terms of an agreement. The estimated aggregate dollar amount of supplier performance and default risk for the portfolio is based on the volume, duration, and price of the agreements as compared to the current estimated market value of the agreements.

DEF reduces supplier performance risk by engaging in business with a number of approved suppliers, executing agreements within contract approval limits and credit parameter limits, monitoring delivery performance of suppliers, and, if possible, incorporating contractual provisions that allow for non-performance remedies in the case of default. In addition, if a supplier defaults, DEF also maintains offsite inventories for natural gas, and on-site inventories for coal and fuel oil. For activities associated with hedging under financial agreements, the Credit function within Risk Management monitors all open positions and reviews the estimated exposure for each third party company to ensure that DEF maintains the appropriate collateral balances as compared to contractual thresholds established.

With respect to monitoring and quantifying the level of supplier performance and default risk in fuel agreements, the Credit function within Risk Management monitors the amount of default risk associated with financial and physical fuel agreements. The review is based on contractual volumes, duration, and prices as compared to the current estimated value of the open positions in the agreements that have yet to be delivered or financially settled.

Liquidity Risk

Liquidity risk represents the risk that DEF could not meet the collateral requirements generated from physical agreements and financial agreements. As discussed above, DEF currently manages natural gas price risk and volatility for a portion of its forecasted fuel costs through the use of financial hedging agreements. To manage default risk, these agreements contain provisions that require the posting of collateral if contractual thresholds are surpassed. The collateral requirements of the portfolio are based on the volume, duration, price, and collateral threshold levels of the agreements as compared to the current estimated market value of the agreements.

DEF manages and reduces liquidity risk by conducting business with a number of counterparties to maximize the collateral threshold levels in individual agreements. For activities associated with hedging under financial agreements, the Credit function within Risk Management monitors all open positions and reviews the estimated market exposure for each third party company on a daily basis to ensure that DEF only posts the appropriate collateral balances as compared to contractual thresholds. With respect to monitoring and quantifying the level of liquidity risk, Risk Management independently calculates, monitors, and reports on the amount of liquidity risk associated with financial and physical agreements. The review is based on contractual volumes, duration, and prices as compared to the current estimated value of the open positions in the agreements that have yet to be delivered or financially settled. Risk Management performs standard statistical stress tests and portfolio analysis on an as needed basis.

DEF continues to monitor the Dodd-Frank Wall Street Reform and Consumer Protection Act and the Commodity Futures Trading Commission's rules that implement the Dodd-Frank Act (collectively, the "Dodd-Frank Act").

The Dodd-Frank Act provides for the comprehensive regulation of swaps and security-based swaps, applying in respects to all swaps, including the bilateral and over-the-counter (OTC) derivatives markets, as well as swaps embedded in physical forward transactions. Generally, the Dodd-Frank Act provides for certain exception from the mandatory clearing requirements and other transactional efficiencies for participants that are "end-users" engaging in hedging activities to mitigate or hedge physical risk. DEF enters into commodity and interest rate hedges to mitigate commercial risk and/or hedge physical positions, rather than as part of a speculative swap business. Therefore, DEF's transactions are eligible for the end-user exception, and the associated exception from the mandatory clearing requirements.

The Dodd-Frank Act also has rules and requirements for record keeping and reporting. Every party to a "swap" (as defined by the Dodd-Frank Act) must keep records over certain periods of the "swap". DEF is maintaining records in accordance with the requirements of the CFTC regulations. As an end-user, however, DEF can shift, and does shift, the reporting obligation to swap counter parties. The CFTC has not finalized the rules for margining and clearing requirements, as well as the position limit requirements. DEF is continuing to monitor and review any issued rules and the timing of their implementation to prepare for applicable compliance requirements. DEF continues to monitor the potential impact of the rules on its financial hedging transactions. However, it is difficult to predict how the market will ultimately adjust to the new regulations.

In general, the implemented and proposed regulations have changed the requirements and could affect the derivatives markets. For example, margining requirements could require counterparties to post additional margin and maintenance margin for OTC derivatives, which would then increase the liquidity requirements needed to support these activities. Although recent amendments would appear to exempt end-users from the mandatory margining requirement, the rules have not been finalized. Currently, DEF has

credit collateral thresholds in place with its counterparties that do not require the posting of collateral unless the market value of the hedges drops below the negotiated threshold dollar value. Additionally, DEF has negotiated bilateral non-margin hedging agreements with counterparties where DEF and the counterparty can agree to not have margin requirements for financial hedging transactions. If some of DEF's counterparties are subject to higher liquidity requirements due to the proposed regulations, DEF could be subject to 1) potential increases in bid / offer spreads on market hedge transactions, 2) reduction by certain counterparties in the use of non-marginable OTC transactions, and/or 3) potential reduction in the number of counterparties who will be available for hedging transactions with DEF. It is also unclear how the position limit rules, which have not been finalized, will impact DEF's activities and compliance obligations.

As noted above, DEF continues to comply with the requirements of the Dodd-Frank Act, as well as monitor any rule making.

Credit Risk

On a daily basis, the Credit function within the Risk Management function calculates, monitors, and reports on the credit risk associated with the Company's fuel procurement and hedging activities. The Credit function utilizes industry-specific credit evaluation practices and has specific criteria that are used to measure credit risk and ensure counterparties' credit is monitored and reviewed. The Credit function monitors all positions and reviews the mark-to-market exposure for each third party company to ensure that based on the current market value of open hedge positions and the credit quality of the third party companies the appropriate level of collateral is posted or received as compared to the contractually established threshold. To date, DEF has not experienced any credit losses with respect to its hedging program activities.

With respect to financial transactions, prior to executing any financial transaction with a third party company, two activities take place. First, DEF and the third party company must have an International Swap Dealer Agreement (ISDA) in place. The ISDA is a standard industry contract that is used by industry participants to enter into Over the Counter bi-lateral transactions (OTC transactions). All ISDA agreements are negotiated by the Legal group and reviewed as needed with Credit, FSO, and Accounting to ensure the appropriate terms and conditions are included. As part of the process of setting up a new financial agreement, a credit evaluation is performed on the third party company by the Credit function. There are universal principles of credit strength that are evaluated before credit is granted. Among these principles are company size, industry characteristics and trends, profitability, liquidity, cash flow, interest coverage, and capital structure. DEF evaluates counterparties using a consistent analytical

approach and the credit ratings are based on both external ratings and an internal evaluation. The credit rating process includes obtaining counterparty background information, identifying any existing Standard & Poor's (S&P) and/or Moody's ratings for the counterparty, and performing a financial statement analysis. The financial statement analysis includes, but is not limited to, a review of revenue trends, metric calculations and trends evaluation for Free Funds from Operations, Total Debt to Tangible Net Worth, Funded Debt to Capital, Interest Coverage, Operating Cash Flow and Liquidity. If the counterparty is a bank, Tier I and Total Capital Ratios are also reviewed. Once the credit evaluation is complete, a credit rating is assigned to the third party company and, if appropriate, a credit limit dictate the size and duration of financial hedging transactions that DEF can enter into with it.

As described, on a daily basis the Credit function independently monitors, calculates and reports on collateral exposure. In addition, with respect to monitoring agreements that require the posting of margin based on established contractual thresholds, the company may ask for margin or send out margin to the third party company to ensure exposures are within established contractual thresholds. See **Attachment B** for the DEF Collateral Report as of July 1, 2015.

Product Availability and Changes in Forecasted Volumes

DEF must have access to needed physical fuel supplies, adequate product delivery capabilities and inventory to meet projected fuel requirements. Without access to needed fuel supply and inventory, DEF is exposed to the risk of not being able to economically and reliably dispatch the generation fleet for its customers.

DEF manages and reduces this risk by entering into physical supply contracts, as well as needed pipeline, railroad, barge, and trucking agreements for the purchase and delivery of coal, natural gas, and fuel oil that provide the ability to meet projected burns. In addition, DEF maintains on-site inventory for coal and fuel oil to provide fuel supplies to support ongoing operations and ensure supplies are available if unexpected delivery delays, storm curtailments, or other events that could affect fuel supply availability occur. DEF also holds off-site high deliverability natural gas storage capacity that provides additional access for a portion of its natural gas needs when natural gas supplies are curtailed. In addition, DEF has firm transportation on Gulfstream Natural Gas, Florida Gas Transmission (FGT), and Southern Natural Gas (Sonat), and has access to onshore gas supplies via contractual volumes delivered on Southeast Supply Header, the Transco Mobile Bay South Lateral and an agreement for supply from Elba Island LNG into FGT via the Sonat Cypress Pipeline. DEF monitors forecasted fuel burns, actual fuel burns, and fuel inventory levels. Based on its on-going

monitoring efforts DEF may make procurement adjustments to manage any changes to the forecasted volume and delivery timing of contracted supplies because of actual burns, changes to forecasted fuel burns, and inventory levels that can be caused by factors such as weather deviations, fuelswitching trends, plant outages, and purchased power opportunities.

With respect to monitoring and quantifying the level of risk associated with ensuring adequate fuel supply, Risk Management independently monitors and reports on the amount of fuel procured versus projected burns. In addition, the front office performs analyses that quantify the amount of fuel and transportation needed to support projected burns and inventory needs. Lastly, the Company performs periodic forecast for fuel burns and purchased power and produces summary reports for review and monitoring of projected fuel burns.

General Risk

DEF is subject to weather events and hurricanes. As detailed above, DEF reduces the overall risks associated with weather events and other potential fuel delivery curtailments and delays by maintaining on-site inventories, offsite inventories, and continuing to diversify its natural gas supply to more secure onshore locations as the Company's overall gas generation has grown. DEF is also subject to events that could require FSO employees to perform required work functions at locations other than their normal work location. With respect to this risk, the FSO Department has business continuity plans in place that are reviewed and tested periodically to ensure that offsite locations are functional. Lastly, DEF is subject to changes in environmental rules and regulations.

Item 4. <u>Describe the company's oversight of its fuel procurement</u> <u>activities.</u>

The Finance and Risk Management Committee (FRMC) of the Board of Directors as well as the Company's Senior Management, defined as the Chief Executive Officer (CEO) and his/her direct reports, provides guidance and oversight to Duke Energy's financial risks. The Chief Risk Officer (CRO) updates the FRMC of any material risks and risk management activities of the enterprise at periodic committee meetings. The Transaction and Risk Committee (TRC) is responsible for oversight of the Corporation's Risk Management activities. The TRC is comprised of senior executives from varying functional areas. The CRO is responsible for annually reviewing the corporate Commodity Risk Policy and Corporate Credit Policy, and the TRC is responsible for approving substantive changes to the policies. The CRO reviews corporate risks and resulting mitigation decisions including fuel hedging and procurement activities. The TRC reviews transactions that exceed individual senior management committee approval authorities. Senior management committee approval authorities are outlined in the Company's Approval of Business Transaction policy (ABT). In addition, the Company maintains a risk management control manual, together with specific risk and credit limits that apply to the activities of DEF. These policies, processes, and limits are reviewed at least annually by the Front Office and Risk Management, and are approved by CRO or the Chief Financial Officer (CFO) as required.

DEF has included the Regulated Utilities Risk Management Control Manual, the Commodity Risk Policy, the Credit Policy, the DEF Regulated Utilities Risk Limits and the DEF Regulated Utilities Credit Limits as **Attachments H**, **D**, **E**, **A**, and **F**.

With respect to day-to-day independent oversight and controls in place to oversee FSO's activities, the company uses the "three-office" structure which includes FSO and Energy Supply Analytics (Front Office), Risk Management (Middle Office), and Regulated Accounting (Back Office) to provide the necessary independent oversight and monitoring of its fuel procurement, power optimization, and hedging activities.

The "three-office" structure is an accepted industry practice with the Front Office, Middle Office, and Back Office each functioning as independent departments, which ensures the required segregation of duties and the existence of independent oversight and controls over key activities. In addition, the Legal organization provides critical contractual support to ensure that the Front Office contracts are reviewed with FSO and contain legal provisions that reduce risks that could affect the Company. The IT Enterprise Application Solution Support organization provides on-going support related to trading system operations and functioning. Treasury and Disbursement Services provide appropriate support when disbursing funds to counterparties via checks, wires, or automated clearinghouse payments. These support organizations are independent from the Front Office.

Front Office

DEF has a structured procurement process where Requests for Proposals are issued periodically to procure needed competitive fuel supply. As noted above, the fuel procurement contracting and settlement activity is supported by the Legal and Regulated Accounting function. Front Office management is responsible for ensuring employees are authorized before they are allowed to trade commodities on the Company's behalf. In addition, there is a corporate Energy Supply Bulk Power Marketing & Trading Delegation of Authorities as well as a corporate Approval of Business Transactions Delegation of Authorities, which provides the required approvals for fuel related procurement activity based on estimated costs and duration of fuel related contracts. Front Office management is also responsible for ensuring that employees who trade commodities on the Company's behalf attend required periodic training conducted by Risk Management and Regulatory Compliance. DEF has included the Duke Energy Commodity Risk Policy, Duke Energy Credit Policy, DEF Regulated Utilities Risk Limits and DEF Regulated Utilities Credit Limits in **Attachments D, E, A, and F**. In addition, DEF has included the Duke Energy Supply Bulk Power Marketing & Trading Delegation of Authorities and the Duke Energy Commodities Approval Matrix from the ABT as **Attachments G and C**, respectively.

Middle Office

Risk Management monitors Front Office activity by quantifying, monitoring, and reporting risks associated with fuel procurement, power optimization, and hedging activities. Risk Management is accountable to the enterprise for independent oversight, measurement, and reporting of Front Office activities to management. Risk Management monitors and reports on Front Office activities and will report immediately any non-compliance as required within the reporting and control limit structures as defined by the Risk Management Guidelines. Lastly, Risk Management publishes credit limit and exposure reports to ensure that counterparty credit limits are monitored and adhered to and administers margin activity as required under agreements with counterparties to reduce credit and default risk.

Regulated Accounting

Accounting is also independent from Front Office and performs the following control functions, among other things, on a daily, weekly, or monthly basis: deal validation, transaction confirmations, close accounting, general ledger balance sheet account reconciliations, settlements/cash transfers, processing payments/receipts, accounting for hedging activities and derivatives, and performing certain compliance activities as defined and/or required by various regulatory agencies (e.g. Securities and Exchange Commission, Financial Accounting Standards Board, Federal Energy Regulatory Commission, Public Service Commission). Related to accounting for hedging activities and derivatives, Duke Energy's Derivatives policy is followed. This policy is reviewed and updated as necessary and at least annually.

Item 5. <u>Verify that the utility provides its fuel procurement activities</u> with independent and unavoidable oversight.

As described in Item 4, the Company has a robust independent oversight culture and organizational design with processes in place to ensure the identification, monitoring, and reporting of risks accompanying independent controls for monitoring and reporting on fuel procurement, power optimization, and hedging activities. The key components of the oversight functions and processes are further described below.

The Finance and Risk Management Committee of the Board of Directors (FRMC)

The FRMC is primarily responsible for the oversight of risk at Duke Energy. This oversight function includes, but is not limited to, review of Duke Energy's risk exposure as related to the overall enterprise portfolio and review of the financial exposures undertaken by the company in light of the approved Global Risk Management Policies. Such exposures include physical and financial positions in the commodities markets. The Committee is comprised of a minimum of two members of the Board.

Transaction and Risk Committee (TRC)

The TRC is responsible for oversight of the corporation's risk management activities as well as reviewing proposed business transactions and risk management activities that require approval by the President and Chief Executive Officer, the Board of Directors, or a committee of the Board of Directors in accordance with the Approval of Business Transactions Policy. The membership of the Committee shall consist of all Senior Management Committee members of the Corporation, excluding the President and Chief Executive Officer, plus the following individuals:

- Vice President and Chief Risk Officer
- Vice President and Treasurer
- Vice President, Internal Audit, Ethics & Compliance

Additional members of executive leadership may be appointed to the Committee by the President and Chief Executive Officer. These appointments should be reviewed by the President and Chief Executive Officer on an annual basis.

Regulated Utilities Risk Management (Risk Management)

Duke Energy has an independent Risk Management section, which is overseen by the TRC Secretary and Director, Regulated Utilities Risk Management who reports to the CRO. The Risk Management group is comprised of a credit risk management function and a market risk management function. Risk Management's credit function provides independent credit evaluation of trading and procurement counterparties, performs credit reviews of Duke Energy's suppliers and customers, assists in drafting and reviewing credit language in various agreements, and monitors and reports on credit exposures daily. Risk Management's market risk function independently reports on fuel procurement and hedging activities and performs independent analysis as required. Risk Management independently develops the methodologies for measuring and evaluating risk.

Regulated Utility Risk Management Control Manual and Regulated Utilities Risk Limits

As part of the overall risk management structure and oversight process at the Company, the Company has a Regulated Utility Risk Management Control Manual, Regulated Utilities Risk Limits and Regulated Utility Credit Limits. These are reviewed by Front Office and Risk Management, and approved by the CRO or the CFO as required.

The Regulated Utilities Risk Management Control Manual provides the descriptions of the objectives and operations of the regulated businesses, the overall control environment in which they operate, and the structure and responsibilities of the various groups involved in the control function. DEF's Regulated Utilities Risk Limits contain the limits and approved activities for DEF. In aggregate, these documents provide for the oversight and controls, roles and responsibilities, and the approved activities associated with fuel procurement contracts, fuel hedging activities, and power activities. Duke Energy's Credit Policy provides the overall objectives and general operating practices for evaluating, measuring, mitigating, and reporting credit risk associated with FSO activities. In addition, the Company has established Credit Risk Limits define prescribed credit limits, including contract duration criteria for counterparties based on credit metrics.

Internal Audit

Internal Audit provides independent assurance and consulting services that ensure compliance, effective corporate governance, adherence to established procedures, and operational effectiveness for all major areas of the Company. With respect to FSO activities, Audit Services performs periodic audits that focus on items such as compliance with established procedures, off-premise activity, payment terms under fuel contracts, and other trading and procurement activities.

Legal and Regulated Accounting

Legal performs contract reviews with the Front Office during drafting and prior to final execution. In addition, Regulated Accounting which includes the Back Office performs, among other things, on a daily, weekly, or monthly basis, deal validation, transaction confirmations, close accounting, general ledger balance sheet account reconciliations, settlements/cash transfers, processing payments/receipts, accounting for hedging activities and derivatives, and compliance activities as defined and required.

Item 6. Describe the utility's corporate risk policy regarding fuel

procurement activities.

The Company has a Regulated Utility Risk Management Control Manual, a Commodity Risk Policy, a Credit Policy, and Regulated Utility Risk and Electric Credit Limits. In addition, the Company has the Duke Energy Supply Bulk Power Marketing & Trading Delegation of Authority, and the Duke Energy Commodities Approval Matrix from the Approval of Business Transactions policy that outline the approval requirements for procurement activities for respective individuals and management levels based on the tenor and estimated dollar amounts of agreement, subject to the requirements of the Approval of Business Transactions policy.

These documents and processes in aggregate outline the expectations, policies, responsibilities, and limits associated with the corporate risk oversight and approved activities for the Company's fuel procurement practices. In addition, as described in detail in item 4, the Company has developed oversight functions and processes that are followed with respect to fuel procurement, power optimization, and hedging activities. DEF has included the Regulated Utilities Risk Management Control Manual, Duke Energy Commodity Risk Policy, Duke Energy Credit Policy, the Regulated Utilities Risk Limits, the Regulated Utilities Credit Limits, the Duke Energy Supply Bulk Power Marketing & Trading Delegation of Authority, and the Duke Energy Commodities Approval Matrix from the ABT as **Attachments H**, **D**, **E**, **A**, **F**, **G**, **and C**, respectively. The fuel purchase and related activities are identified under the Energy Supply Bulk Power Marketing & Trading Delegation of Authority, Regulated Utilities Risk Limits and the Commodities Approval Matrix.

Item 7. Verify that the utility's corporate risk policy clearly delineates individual and group transaction limits and authorizations for all fuel procurement and hedging activities.

DEF has approval requirements, policies, and authorizations in place that outline authorizations for fuel procurement and hedging activities. DEF has included DEF's Regulated Utilities Risk Limits and corporate Duke Energy Commodity Risk Policy in **Attachments A and D**, respectively. These policies and guidelines outline roles and responsibilities of each group, deal execution processes, and allowed products, as well as control limits such as volumetric, tenor, and liquidity limits and deal validation and valuation processes. Additionally, the Duke Energy Supply Bulk Power Marketing & Trading Delegation of Authority and the Duke Energy Commodities Approval Matrix from the ABT outline the approval requirements for procurement activities for respective individuals and management levels based on the tenor and estimated dollar amounts of agreement, subject to the requirements of the Approval of Business Transactions policy. The Duke Energy Supply Bulk Power Marketing & Trading Delegation of Authority, and the Duke Energy Commodities Approval Matrix from the ABT are included in **Attachments G and C**, respectively.

Item 8. <u>Describe the utility's strategy to fulfill its risk management</u> objectives.

As outlined in Item 1, DEF's 2016 Risk Management Plan objectives are to effectively manage its overall fuel and purchased power costs for its customers by engaging in competitive fuel procurement practices and activities, performing active asset optimization and portfolio management activities, and continuing to execute the Company's hedging program to reduce fuel price volatility risk and provide greater cost certainty for DEF's customers. Outlined below is the strategy to fulfill the risk management objectives.

First, the strategy is executed by experienced professionals who conduct and execute their activities to achieve the objectives of the plan.

One of the components of DEF's Risk Management Plan objectives is to engage is competitive fuel procurement practices. Examples of the strategy executed to fulfill this objective include the issuance of periodic RFP's to solicit competitive term supply bids for coal, natural gas, and fuel oil. In addition, DEF actively manages its day-to-day fuel needs and participates in the short-term market place to access competitive supply and work closely with suppliers as needed. With respect to the strategy executed to achieve the objective of performing active asset optimization and portfolio management activities, the Portfolio Management Unit within FSO performs daily forecast to determine optimal unit commitment and dispatch based on generation costs and market prices, and together with the Power Trading Unit within FSO, monitors the hourly cost to dispatch the generation fleet compared to available market opportunities. The Power Trading Unit actively seeks opportunities to execute economic purchases and sales that reduce costs for the customers. Lastly, with respect to the strategy executed to fulfill the objectives of the hedging program, DEF, by virtue of locking in fixed price for a portion of forecasted usage over time via its financial hedging program, achieves this objective as a portion of DEF's fuel costs are no longer subject to changing price risk and volatility due to changing fuel markets.

Along with the examples noted above, DEF's Risk Management Plan activities are governed by independent controls and audits, strong processes, appropriate organizational design and oversight, deal approval requirements, and the existence of needed guidelines and procedures. The Company has established controls, guidelines, procedures, and organizations to support and independently monitor fuel procurement, hedging, and power optimization activities. As noted in items 4 and 5, the Company has a robust oversight culture and processes that include oversight by the TRC, periodic audits by Audit Services, and independent reporting and credit monitoring by Risk Management to ensure adherence to established guidelines and procedures.

Item 9. <u>Verify that the utility has sufficient policies and procedures to</u> <u>implement its strategy.</u>

DEF maintains sufficient guidelines and procedures to implement its strategy. Please see **Attachment J** for a summary listing of the applicable guidelines and procedures.

Item 13. <u>Describe the utilities reporting system for fuel procurement</u> <u>activities.</u>

The Company utilizes multiple systems and applications to track, record, account, and report on executed fuel procurement activities. Descriptions of the primary systems, software, and other tools are provided below.

Forecasted fuel burns are prepared by the Company using a production cost simulation model called GenTrader. Fuel and other commodity price forecasts, load forecasts, purchased power deal information, generating unit operating characteristics, maintenance schedules, and other pertinent data are input into GenTrader which then simulates the system and computes a projected fuel burn requirement.

CXL is a software application used by the Company to capture natural gas physical procurement transactions as well as financial natural gas and light oil transactions. In addition to deal capture, CXL is used for deal valuation, position management, mark-to-market calculations, and settlements. CXL is integrated with the GasOps which is a natural gas scheduling tool used to match supply and deliveries. Once volumes are updated in GasOps with actual volumes, there is a process that systematically updates the physical deals in CXL.

The GasOps is a software application used by the Company to match supply, transport, and deliveries for natural gas purchases, sales, and transport activity and the administration of associated contracts. The system is integrated with CXL as outlined above, which provides for greater efficiency and controls for gas related activities.

Comtrac is a software application used by the Company to capture and track physical procurement activity for coal and fuel oil. The system assists with administering contract terms and conditions, maintaining inventory levels, capturing fuel consumption information, and issuing monthly closeout processes, including invoicing, and settlements.

Risk Management utilizes a separate Credit and Market Risk System that is directly integrated with CXL to monitor and report on fuel procurement transactional activity and counterparty credit exposure.

Front Office, Risk Management, and Accounting utilize other programs such as Business Objects and Excel to summarize, evaluate, and report on fuel procurement transactions and counterparty credit evaluations. In addition, Energy Supply Analytics and Risk Management utilize Matlab, a computer programming language, to model potential forward exposures and run other fuel scenarios as needed by the business units.

Lastly, the Company has agreements with vendors to provide real time pricing feeds to monitor real-time natural gas, fuel oil, and power market prices.

Item 14. <u>Verify the utility's reporting system and other tools</u> <u>consistently and comprehensively identifies, measures and</u> <u>monitors all forms of risk associated with fuel procurement</u> <u>activities.</u>

As outlined in the response to item 13, the Company utilizes several applications to ensure procurement and financial hedging activities are captured, measured, monitored, confirmed, accounted for, and reported. The Company uses standard industry reporting templates, valuation techniques and applications. The current applications utilized by the Company provide the necessary functionality for capturing deals, summarizing fuel positions, calculating mark-to-market valuations, calculating credit and collateral exposures, generating confirmations, supporting billing and payment requirements, and maintaining needed historical information such as prices and trade data.

Item 15. If the utility has current limitations in implementing certain hedging techniques that would provide a net benefit to ratepayers, provide the details of a plan detailing the resources, policies, and procedures for acquiring the ability to use effectively the hedging techniques.

DEF does not believe that there are any current limitations to execute its hedging strategy in a reasonable and prudent manner.

ATTACHMENT A

REDACTED

DEF's Regulated Utilities Risk Limits (10 PAGES)

ATTACHMENT B

REDACTED DEF ISDA COLLATERAL SUMMARY (1 PAGE)

ATTACHMENT C

REDACTED DEF AUTHORITY LIMIT MATRIX (2 PAGES)

ATTACHMENT D

REDACTED DEF COMMODITY RISK POLICY (6 PAGES)

ATTACHMENT E

REDACTED DEF CREDIT POLICY (5 PAGES)

ATTACHMENT F

REDACTED DEF REGULATED UTILITIES CREDIT LIMITS (5 PAGES)

ATTACHMENT G

REDACTED

DEF ENERGY SUPPLY BULK POWER MARKETING & TRADING DELEGATION OF AUTHORITY (2 PAGES)

ATTACHMENT H

Duke Energy Corporation Regulated Utilities Risk Management Control Manual



April 30, 2015



Risk Management Controls and Procedures for Fuels & Systems Optimization and Distributed Energy Resources

Confidential Information

The information contained within this manual is confidential and proprietary to Duke Energy Corporation's Regulated Utilities & Gas group, particularly Fuels & Systems Optimization (FSO) and the Distributed Energy Resources (DER) group and the various groups supporting these operations as further defined within this manual. Confidential and proprietary information is a valuable resource. Release of this information to the general public could lead to a competitive disadvantage for Duke Energy Corporation and its subsidiaries ("Duke Energy").

Also, release of this information to the Non-Regulated portions of Duke Energy could result in violation of regulatory rules (FERC Affiliate Restrictions/Standards of Conduct). Confidential and proprietary information must be protected from unauthorized use, modification, disclosure, or destruction whether intentional or unintentional. Duke Energy employees must also comply and acknowledge review of the Code of Business Ethics policy.



Table of Contents:

I.	Introduction and Purpose	5
	Risk Management Policies and Procedures	5
	Control Manual Amendments and Approvals	6
	Legal and Regulatory Compliance	6
	Exception Process	7
	New Employees	8
	Inter-Affiliate Transactions	8
II.	Concept of Operations	9
	Duke Energy Carolinas & Duke Energy Progress	9
	Duke Energy Florida	. 10
	Duke Energy Indiana & Duke Energy Kentucky	. 10
	Duke Energy Ohio	. 11
III.	Roles and Responsibilities	. 12
	Role of Corporate Officers	. 12
	Segregation of Function and Ownership	. 12
	Role of Chief Risk Officer	. 12
	Role of Global Risk Management	. 13
	Role of Fuels & Systems Optimization	. 13
	Role of Traders	. 14
	Role Regulated Fuels	. 14
	Role of Distributed Energy Resources	. 15
	Role of Energy Supply Analytics	. 15
	Role of Contract Management	. 15
	Role of Internal Audit	. 16
	Role of Ethics and Compliance	. 16
	Role of Duke Energy General Counsel	. 16
	Role of Accounting	. 16
	Role of Treasury	. 17
		10
IV.	Control Requirements and Activities	. 18
	Risk Management	. 18
	Risk Management - Credit Risk	. 19
	Violations of Risk Control Manual	. 20
	Fuels & Systems Optimization	. 21
	Contract Management	. 24
V.	Dodd-Frank	. 25
Ap	pendices:	

Appendix A – Key R	Risks	27
--------------------	-------	----



Appendix B – Unauthorized Transactions	. 29
Appendix C – Confirmations & Settlement Activities	. 30
Appendix D – New Products/Business Activities Approval Process	. 33
Appendix E – New Product Checklist	. 34
Appendix F – Potential Trade Exceptions	. 35
Appendix G – Potential Deliver Term Violations	. 36
Appendix H – Employee Acknowledgment	. 37
Appendix I – FERC 741 Officer Certification Process	. 39



I. Introduction and Purpose

Risk Management Policies and Procedures





Control Manual Amendments and Approvals

Legal and Regulatory Compliance



Exception Process

7

Regulated Utilities Risk Management Control Manual



New Employees

Inter-Affiliate Transactions



II. Concept of Operations

Carolinas (Duke Energy Carolinas & Duke Energy Progress)


Duke Energy Florida

Duke Energy Indiana & Duke Energy Kentucky



Duke Energy Ohio



III. Roles & Responsibilities

Role of Corporate Officers

Segregation of Function and Ownership

Role of the Chief Risk Officer



Role of Global Risk Management

Role of Fuels & Systems Optimization



Role of Traders

Role of Regulated Fuels

14

Regulated Utilities Risk Management Control Manual



Role of Distributed Energy Resources



Role of Energy Supply Analytics



Role of Contract Management



Role of Internal Audit

Role of Ethics and Compliance

Role of Duke Energy General Counsel

Role of Accounting





Role of Treasury



IV. Control Requirements and Activities

Risk Management



Risk Management – Credit Risk

19



Violations of Risk Control Manual

20



Fuels & Systems Optimization



22





Contract Management



V. Dodd-Frank



26



Appendix A

Kev Risks



Appendix B

Unauthorized Transactions

Appendix C

Confirmation Activities

32

Appendix D

New Products/Business Activity Approval Process

Appendix E

New Product Checklist

Appendix F

Potential Trade Exceptions

Appendix G

Potential Delivery Term Violations

Appendix H

Risk Management Employee Acknowledgment

Employee Name:___

(Please print)

RISK MANAGEMENT EMPLOYEE ACKNOWLEDGMENT

Global Risk Management has a combination of Policies, Risk Limits, Guidelines and procedures referred to as the "Risk Documents" that contain certain information regarding the governance and procedures of certain Duke Energy activities. Please read and review the appropriate Risk Documents. If you have any questions regarding the Risk Documents, you are to contact your immediate supervisor. It is very important that you understand how the Risk Documents apply to your current position. After reading and understanding the appropriate Risk Documents, please check the Risk Documents read and understood below and sign the Risk Management Employee Acknowledgment as instructed in the last line below.

Check all that apply:

•	Duke Energy Commodity Risk Policy (applies across all entities)
•	Duke Energy Credit Policy (applies across all entities)
•	Model Review and Approval Process (applies across all entities)
•	Derivative Transaction Policy (applies across all entities)
•	Duke Energy Regulated Utilities Risk Management Control Manual
•	Duke Energy Forward Market Price and Volatility Curve Control Manual
•	Duke Energy Carolinas & Duke Energy Progress Risk Limits
•	Duke Energy Florida Electric Risk Limits
•	Duke Energy Indiana Electric Risk Limits
•	Duke Energy Indiana Electric Risk Limits
•	Duke Energy Indiana Electric Risk Limits
• • •	Duke Energy Indiana Electric Risk Limits
• • •	Duke Energy Indiana Electric Risk Limits Duke Energy Kentucky Electric Risk Limits Duke Energy Ohio (Reg) Electric Risk Limits Duke Energy Credit Limits for DEC, DEP, DE-IN, DE-KY Duke Energy Florida Credit Limits

I have read the Risk Documents as indicated above outlining Duke Energy's expectations of me. I understand and acknowledge these Risk Documents apply to my

position. I acknowledge and agree that it is my responsibility to comply with all aspects of the Risk Documents as well as any future revisions made to the Risk Documents. If I encounter a situation in which I do not know how the Risk Documents applies, I will contact my immediate supervisor.

I further acknowledge and agree that I will contact my immediate supervisor should my responsibilities at Duke Energy change and questions arise regarding the application of the Risk Documents to my new position and/or responsibilities.

I understand and acknowledge that my failure to comply with the Risk Documents will result in corrective action, up to and including termination.

I ACKNOWLEDGE AND UNDERSTAND THAT NEITHER THE RISK DOCUMENTS EMPLOYEE ACKNOWLEDGMENT NOR ANY OF DUKE ENERGY'S POLICIES OR PROCEDURES, INDIVIDUALLY OR TOGETHER, CONSTITUTE A GUARANTEE OF CONTINUED EMPLOYMENT, CREATE A CONTRACT OF EMPLOYMENT OR ALTER THE AT-WILL NATURE OF MY EMPLOYMENT IN ANY WAY.

Employee Signature

/ Date

Employee Title

Print Full Name

Appendix I

FERC 741 Officer Certification Process



FERC Order 741 Certification Process

Appendix H

Risk Management Employee Acknowledgment

Employee Name:___

(Please print)

RISK MANAGEMENT EMPLOYEE ACKNOWLEDGMENT

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•	Duke Energy Forward Market Price and Volatility Curve Control Manual
•	Duke Energy Carolinas & Duke Energy Progress Risk Limits
•	Duke Energy Florida Electric Risk Limits
•	Duke Energy Indiana Electric Risk Limits
•	Duke Energy Kentucky Electric Risk Limits
•	Duke Energy Ohio (Reg) Electric Risk Limits
•	Duke Energy Credit Limits for DEC, DEP, DE-IN, DE-KY
•	Duke Energy Florida Credit Limits
•	Delegation of Authority – Fuels & Systems Optimization

I have read the Risk Documents as indicated above outlining Duke Energy's expectations of me. I understand and acknowledge these Risk Documents apply to my

position. I acknowledge and agree that it is my responsibility to comply with all aspects of the Risk Documents as well as any future revisions made to the Risk Documents. If I encounter a situation in which I do not know how the Risk Documents applies, I will contact my immediate supervisor.

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I ACKNOWLEDGE AND UNDERSTAND THAT NEITHER THE RISK DOCUMENTS EMPLOYEE ACKNOWLEDGMENT NOR ANY OF DUKE ENERGY'S POLICIES OR PROCEDURES, INDIVIDUALLY OR TOGETHER, CONSTITUTE A GUARANTEE OF CONTINUED EMPLOYMENT, CREATE A CONTRACT OF EMPLOYMENT OR ALTER THE AT-WILL NATURE OF MY EMPLOYMENT IN ANY WAY.

Employee Signature

/ Date

Employee Title

Print Full Name

Attachment J

Company Guidelines and Procedures

Document Title	Document Summary
Approval of Business Transactions Policy	The Approval of Business Transactions (ABT) Policy outlines the minimum reviews and approvals required for the execution of transactions, documents and forms neces
	for the conduct of business.
Authority Limit Matrix from the Approval of Business	Duke approval limits for specific employees for purchase or sale of commodities, storage, transportation or capacity or other sales.
Transactions Policy	
Coal and Emission Reducing Chemicals Procurement	This policy defines the roles, responsibilities, and requirements of negotiation, execution and administration of contracts for the purchase and transportation of fuel anc
Procedure	emission reducing chemicals (e.g., coal, lime, limestone, trona, ammonia, urea, freeze-proofing, railcar lease and maintenance, etc.) within the U.S. Franchised Electric a
	Gas organization of Duke Energy Corporation ("Duke Energy" or the "Corporation" or the "Company"). Specific topics addressed include required approvals, the sourcing
	process, documentation, segregation of duties, and standards of business conduct.
Commodity Risk Policy	The purpose of the Commodity Risk Policy ("the Policy") is to provide clear and consistent directives in the identification, quantification, management and communication
	of commodity risk across the Enterprise. This Policy covers all sales or purchases of commodities, storage, transport, capacity or fuel procurement and related services,
	and contracts with embedded commodity exposure. Approved commodities include both standardized products as well as structured contractual products and must be
	listed in the Approved Commodities section of the applicable risk limits for each Business Unit.
Constrained Operations Application	This procedure establishes the roles and responsibilities for use of the Constrained Operation Application by System Operations Energy Control Center (ECC) and System
	Operations Center (SOC) personnel. Fuels and System Optimization (FSO). Short Term Planning (STP). Power Generation Carolinas and Florida personnel. Specifically, thi
	procedure defines the functions of these organizations and the communications necessary to support the planning and implementation of unit constraints, including
	testing, maintenance, and derates, in an economic manner, considering operational constraints and margins required for system reliability.
Credit Policy	Extending and monitoring credit to customers and counterparties is integral to all of Duke Energy Corporation's businesses. Global Risk Management (GRM) has establis
,	standards of practice related to the management of credit risk across Duke Energy Corporation and its subsidiaries ("Duke Energy"). This policy governs the extension o
	credit related to wholesale business activity (including fuel procurement), enterprise sourcing (including major construction projects), and other business activities as
	described herein.
Delegation of Authority Policy	This policy establishes the approval authority limits for all employees within the organization below the Senior Management Committee. Approval authority limits for the senior Management Committee authority limits for the senior Management Committee.
	Board of Directors, President and Chief Executive Officer (CEO), and Senior Management Committee members are defined in the Approval of Business Transactions (AB)
	Policy. Employees based outside of the United States are covered by the Delegation of Authority Policy – International Employees.
Derivative Transactions Governance Policy	Duke Energy companies engage in derivative transactions, including swap transactions, to hedge or mitigate commercial risk. These transactions may be subject to laws
	the United States, the European Union, and other countries that are designed to mitigate systemic risk to financial systems, increase transparency, and promote market
	integrity, among other goals. Duke Energy intends to comply with all such applicable laws and regulations.
Duke Energy Corporation Regulated Utilities Risk	This document, the Regulated Utilities Risk Management Control Manual (Control Manual), is intended to present a description of the internal control environment and
Management Control Manual	related control procedures for the regulated trading functions including but not limited to power, gas, emissions, coal and Renewable Energy Certificates.
Duke Energy Global Risk Management Credit Delegation Of	The Credit Delegation of Authority ("Credit DOA") contains various required credit activities and standards involved in setting credit limits including the delegation of cre
Authority	authority. It bridges the Credit Policy and evolving market conditions as well as provides guidance for best practices to ensure consistent application across Duke Energy
	Corporation and its subsidiaries ("Duke Energy"). As such, the Credit DOA may be more frequently reviewed and updated than the Credit Policy. Business Units ("BU") a
	required to conform with this Credit DOA in conjunction with the requirements of the Approval of Business Transactions.
Duke Energy Global Risk Management Credit Procedures	The purpose of this Credit Procedures Manual ("Credit Manual") is to set forth guidelines to help Business Units (BU's) and Global Risk Management (GRM) develop
Manual	consistent procedures throughout the enterprise with regard to measuring, monitoring and reporting of credit risk. It is intended to complement the Credit Policy and
	Credit Delegation of Authority, by providing more specific guidance, primarily for GRM personnel assigned to support specific business units.
Duke Energy Supply Bulk Power Marketing & Trading	Delegation of Authority approval limits for specific employees
Delegation of Authority	
Duke Energy's FERC Compliance Program	Duke Energy's FERC Compliance Program outlines the key regulatory requirements and compliance standards related to the FERC regulations that are applicable to Duke
	Energy.
Attachment J Company Guidelines and Procedures

Document Title	Document Summary
Duke Energy's NERC Enterprise Compliance Program	Duke Energy's NERC Enterprise Compliance Program establishes the corporate standards for compliance with electric reliability standards developed by the North Amer
	Electric Reliability Corporation (NERC).
Duke Energy's Standards of Conduct Written Procedures	Pursuant to the Federal Energy Regulatory Commission (FERC) regulations, Duke Energy's franchised public utilities are required to have written procedures which gover
	the relationship between transmission function employees and marketing function employees. In addition, this procedure documents certain information that is require
	to be posted on Duke Energy's website related to the Standards of Conduct.
FPO NERC E-Tag for Physical Power Deals	Define process developed to ensure compliance with NERC Interchange (INT) Standards; specifically, those related to the completion and validation of NERC E-Tag
	electronic documents for physical power transactions.
FPO Operational Communications	The purpose of this procedure is to establish protocols for routine daily / hourly communications/interaction between Marketing Function Employees (MFEs) within the
	Fuels and System Optimization (FSO) Department and Transmission Function personnel at the respective Energy Control Centers (ECCs), System Operations Center (SOC
	and Hydro Central.
FSO – DEC and DEF Gas Trading Procedure for Off-	This procedure defines the process in which off-premise gas procurement, scheduling and trading shall be conducted for all the company's gas generation facilities in the
Premise Transactions	Carolinas and in Florida.
FSO - DEF Long-Term Gas Supply RFP Process	The purpose of this process is to outline the Long-Term RFP process by which Duke Energy Florida (DEF) procures competitively priced natural gas to meet its longer-ter
	projected fuel needs at its owned and tolled gas generation facilities in Florida.
FSO – DEF Short-Term Gas Procurement and RFP Procedure	The purpose of this procedure is to outline the Short-Term RFP process by which Duke Energy Florida (DEF) procures competitively priced natural gas to meet its shorter
	term projected fuel needs at the company's owned and tolled gas generation facilities in Florida. For clarity: short-term RFP gas procurement activities typically are for
	monthly, seasonal and annual periods for the current year and the following year for which natural gas supplies are projected to be needed to meet DEF's daily, monthly
	seasonal and annual needs at its owned and tolled gas generation facilities. DEF procures a portion of its projected fuel needs through the short-term RFP processes and
	needed will procure competitively priced natural gas supply through informal market solicitations based on the specific business opportunities and need. Also, DEF may
	procure gas on a short-term spot basis for seasonal, monthly, or daily needs based on changing forecast. There may be instances due to timing and business needs that
	there is an overlap between activities that are defined as the short-term and long-term activities. In following this procedure, it may also be necessary for DEF to have
	related capacity release activities that need to be followed which are outlined in the FSO - DEF Short-Term Transportation Capacity Procedure (STDP-MKT-FSO-00004).
FSO - DEF Short-Term Transportation Capacity Procedure	This procedure defines the process by which the Trader procures short-term capacity based on projected need and ensures compliance with FERC capacity release
	regulations.
FSO Long-Term Firm Natural Gas Transportation Process –	This procedure defines the process by which Duke Energy Florida ("DEF") procures reliable and competitively priced long-term firm transportation for DEF for a term of
Florida	vear or greater to meet projected long-term needs for owned generation facilities and tolled generation facilities where DEF has responsibility for the natural gas supply
FSO – Regulated Oil Procurement Procedure for Off-Premise	This procedure defines the process in which off-premise oil procurement (physical spot purchase) shall be conducted with a supplier not under current contract, for Duk
Transactions	Energy Florida (DEF), Duke Energy Progress (DEP), Duke Energy Carolinas (DEC), Duke Energy Indiana (DEI) and Duke Energy Kentucky (DEK).
Fuel and System Optimization (FSO) DEF Emissions Trading	The Fuel and System Optimization (FSO) department which manages SO2 & NOx allowance under Cap and Trade programs Cap and Trade programs as well as other REC
Process & Procedure Check List	related programs for Duke Energy Florida's (DEF) generation system as applicable as applicable. The purpose of managing these emissions credits for DEF is to ensure
	compliance with any Federal EPA cap and trade regulations as well as any additional regulation adopted by State or Federal legislation.
Evel and System Ontimization (ESO) DEE Oil Progurament	The number of this process is to onsure that appropriate volumes of compatitively priced fuel oil and transportation are available for Duke Energy Elerida (DEE) pative (
Process	The purpose of this process is to ensure that appropriate volumes of competitively priced deriver of and transportation are available for Duke Energy Florida (DEF) hat we it
Process	Dresurement & RDE Presess is the following: As peeded establish "requirements type" fuel oil supply commitments for No. 2 fuel oil of up to one year or longer, with th
	ability to renew for additional periods if there are no material changes to contract terms, pricing, fuel energifications or overall fuel need. Balance fuel oil procurement up
	torm contracts with spet contracts. Define the process to colicit, evaluate, and recommend fuel oil transactions to meet DEE's fuel oil requirements.
	term contracts with spot contracts. Denne the process to solicit, evaluate, and recommend rule on transactions to meet DEP's rule on requirements
Fuel and System Ontimization (ESO) Spot Market DEE Oil	To ensure that appropriate volumes of competitively priced fuel oil are available for Duke Energy Florida (DEE) pative load oil-fired generation in order to most pooking
Procurement Process	hase load fuel oil requirements, utilizing approved processes and procedures. The purpose of this Spot Market DEE Oil Procurement Process is to describe the process to
	acquire fuel oil in addition to what is available under long term contracts
Fuel Oil Emergency Procedure - PEE	This procedure outlines the process required when a fuel oil emergency occurs

Attachment J

Company Guidelines and Procedures

Document Title	Document Summary
Fuels and Power Optimization Electronic Futures Exchange	Electronic trading platform for energy trading and price discovery.
Management Procedures	
Generating Unit Heat Rates	This Procedure establishes the processes and administrative controls for receiving I/O data for each generating unit in the generation fleet and how that data is used to
	develop heat rate performance information.
Generating Unit Maintenance Scheduling	This procedure establishes the process for the development and revision of the Generating Unit Maintenance Schedule (GMS). The GMS process focuses on mid-term
	optimization for system economics, market opportunities, and craft resources given necessary constraints for system reserve levels, budget, and regulatory constraints.
	GMS revision process includes the semi-annual optimization and Outage Change Request (OCR) processes.
Generation and Fuel Forecast	This procedure establishes the roles, responsibilities, and process for the Generation and Fuel Forecast (GFF). The primary objective of the GFF is to provide updates to t
	20-year planning horizon of planned generation and resource additions.
GenTrader Schedule of Authorities	The purpose of this document is to define the responsibilities of Portfolio Management (PM), and Information Technology and Telecommunications (IT&T) positions relations
	to management and use of the Fuels & Power Optimization (FPO) GenTrader (GT) system.
GenTrader Usage Procedure	The purpose of this document is to describe the procedures to be followed when using the Fuels & Power Optimization (FPO) GenTrader (GT) system used by Portfolio
Ĭ	Management (PM) groups.
Model Review and Approval Process	Model risk, the risk originating from using models for valuation and hedging, can be significant for any company with exposure to complex assets and financial positions
	Duke Energy, the vast majority of positions are marked-to-model. Very few positions are truly marked-to-market; that is, liquid market prices are seldom available. As su
	model risk becomes extremely important. Model risk may be thought of as originating from three sources: 1) poor or incorrect modeling, including input estimation error
	and poor data, 2) trade limitations such as lack of liquidity and transaction costs, and 3) improper use of an otherwise valid model. In such a situation, the review or vett
	of models and their use becomes crucial to the business as a way of reducing model risk. This document is a description of the review process at Duke Energy.
Operating Plan Development and Implementation	This procedure establishes the roles and responsibilities for Transmission Operations and Planning (TOP) Energy Control Center (ECC) personnel, Fuels and Power
	Optimization Department (FPO), Power Generation Department Carolinas and Florida. Specifically, this procedure defines the functions of these organizations and the
	communications necessary to support economic optimization of all resources while considering operational constraints and reserve margins requires for system reliability
Operational Post Analysis and Transaction Costing Process	This procedure establishes the process for Operational Post Analysis and after-the-fact costing (Recosting) of excess generation sales and economy purchases.
Regulated Utilities Credit Limits	This document contains guidance for compliance with the limits applicable to Duke Energy's regulated wholesale generation activities, and other approved activities wit
	the Regulated Utilities business as described herein.
Regulated Utilities Risk Limits	This document contains the limits applicable to Duke Energy Florida (and its successor), including regulated wholesale generation activities, and other approved activitie
	within the Franchised Electric business that entail some form of commodity price risk as described herein.

Note: These policies and procedures are as of July 8, 2015