UTILITY COMMITTEE

The Utility Committee Meeting was held on August 10, 2015 at 5:00 p.m. with Chairman Hutchison presiding. Members present were Mr. Cole, Mr. Neil, Mr. Blakeman, and Ms. Stewart. Members of Council present were Mr. Anderson (arrived at 5:07 p.m.), Mr. Hare (arrived at 5:40 p.m. and departed at 5:42 p.m.), and Mr. Slavin (arrived at 5:50 p.m. and departed at 5:55 p.m.). Mayor Christiansen (arrived at 5:02 p.m.) was also present.

AGENDA ADDITIONS/DELETIONS

Mr. Neil moved for approval of the agenda, seconded by Mr. Blakeman and unanimously carried.

Annual Review and Approval of Governing Policy for Energy Commodity Risk Management

Members were advised that the City of Dover has in place an approved risk management policy associated with the purchase of energy commodity and related investment contracts. The purpose of the energy commodity and investment contracts resulting from the application of the risk management policy is: (i) to secure economic and reliable energy supply to meet the ongoing energy requirements of the City and its citizens, and (ii) to provide price certainty for those end users purchasing electricity supply from the City.

Mr. Scott Koenig, City Manager, stated that City management, along with The Energy Authority (TEA) and their client manager, completed their annual review of the Energy Commodity Risk Management Policy, and he reviewed the changes recommended for the Utility Committee and City Council acceptance. He indicated that the revisions were maintenance changes recommended by both TEA and staff to clarify issues, streamline the process, or remove language that was outdated because of the changing markets.

Staff recommended acceptance of the revised Governing Policy for Energy Commodity Risk Management.

Referring to Page 13 - Risk Limits and Risk Measurements, A. Limits, Item #1, Volume/ Maturity/Value Limits, Mr. Blakeman noted the inclusion of Fuel Oil #6 in the chart. He questioned if the City was still buying #6 oil and was permitted to burn it. Responding, Mrs. Donna Mitchell, Controller/Treasurer, stated that the City was no longer buying #6 fuel oil.

Mr. Koenig stated his belief that the City was not permitted to burn this type of oil and that this could be removed from the policy. Mr. Blakeman supported removing it, feeling that it was misleading.

With reference to Item #2, Delegation Authority, on Page 13, Mr. Blakeman noted the statement that "The ERMC may delegate these authorities to individuals authorized to commit Dover to financial obligations." He questioned if there was a list of these authorized individuals. Responding, Mr. Koenig stated his belief that the positions that are able to commit to those transactions were specified on Page 8 - Management and Controls, B. Executive Risk Management Committee (ERMC), which defines the roles of the members of the ERMC. He noted that the members of the ERMC include the City Manager, Director of the Utility, and Controller, and between these three (3) individuals, the City has the authority to make those transactions.

Mr. Blakeman questioned if the "individuals authorized to commit Dover to financial obligations" referred to the members of the ERMC committee. In response, Mr. Koenig stated that TEA can perform a small range of transactions themselves.

Mr. Blakeman questioned if these transactions would be performed by an employee of TEA. Responding, Mrs. Mitchell stated that TEA's current service manager is one of the members of the ERMC and this individual would instruct their employees to do hedging. She confirmed that the Utility Committee would authorize the City's members of the ERMC Committee to authorize TEA to act.

Mr. Blakeman indicated that it might be helpful if someone at TEA was listed so that it would be known who this was going to be. Mrs. Mitchell explained that position titles rather than the names of ERMC members were included in the policy to avoid the need to revise the document when there are staff changes. Mr. Blakeman noted that the statement referenced only "individuals authorized." He did not feel that individuals needed to be specified but thought that the term "other authorized individuals" was vague.

Mr. Koenig expressed his belief that delegation would also be covered by TEA's insurance, etc. TEA would not delegate this responsibility to an unqualified person since TEA would be as responsible as the City.

With reference to Item #3, Volume Limits on Page 13, Mr. Blakeman referred to the statement that "For no reason should a transaction be executed that exceeds the City's electric load requirements" and questioned if this referred to exceeding the limits on an hourly, daily, or monthly basis and if there was a time frame attached to exceeding. In response, Mr. Koenig stated his belief that the excess would be based on the purchase. If the City were purchasing load to 80% for the current year, this may involve day-ahead transactions, which the City sometimes makes. He stated that it would be either the cumulative load profile for the year or the daily expected load profile, noting that there are many kinds of transactions that happen. Mr. Koenig indicated that it could be a daily, monthly, or annual time frame.

Mrs. Mitchell stated that this would be based on TEA monitoring the City's load and needs, noting that TEA is not supposed to exceed this. She concurred with Mr. Koenig that this is based on the percentage that is hedged versus what the City buys in the open market. Mrs. Mitchell advised members that the City does not hedge 100% in case the load for the month does not come in at 100% and that volumes are measured.

Mr. Blakeman questioned, if 80% of the load were hedged, whether this percentage could not be exceeded. Responding, Mrs. Mitchell stated that TEA can buy what they need on the market based on the load but cannot exceed 100%.

Mr. Koenig stated that the hedge target for FY 16, which began on July 1, 2015, was 80% in the month of July. The City was still carrying 20% of the load as short-term purchases and trying to take advantage of the market. In FY 17, a target of 60% of the estimated load was set. He explained that the City is under 100% on a rolling basis moving through the year. When starting each year, the City would not be over 80% of the projected load.

Mr. Blakeman suggested, perhaps not this year but next year, that the language be clarified as he felt it was vague.

Noting that the policy references the City of Dover hedge program, Ms. Stewart questioned if there was a hedge program document available for her review as a new member of the Committee. Responding, Mr. Koenig stated that staff would bring this document forward.

Mr. Blakeman moved to recommend acceptance of the revised Governing Policy for Energy Commodity Risk Management (*Attachment #1*). The motion was seconded by Mr. Neil and unanimously carried.

Quarterly Review of Utility Related Capital Investment Plan (CIP) (Electric and Water/ Wastewater) *(April, May, and June)* (Pre-Audit)

Mr. Scott Koenig, City Manager, reviewed the preliminary Capital Investment Plan Project Tracking Quarterly Report as of June 30, 2015. He advised members that staff in the Public Works Department, the Electric Department, and in some other departments with respect to vehicle purchases, had been working diligently to finish a backlog of projects that had accumulated over several years. Mr. Koenig expressed his pleasure that a number of the projects listed in the report that had been in progress for some time had been completed. He noted that some projects, such as stormwater utility planning, were multi-year projects and were expected to extend beyond one (1) year.

Mr. Koenig indicated that staff had worked hard to complete the Garrison Oak Technical Park (GOTP) improvement projects, which were expected to be completed in FY 16 and a backlog of individual street paving and utility-related projects that had been lagging behind had been caught up. Mr. Koenig stated that a number of projects were under construction throughout the City, and several street program and community transportation projects under the General Fund had closed out. He advised members that some projects still lingered, such as the Lincoln Park Center, as well as some small unused funds in some individual Community Transportation Fund locations.

In regard to the water and sewer utility, Mr. Koenig stated that staff had been working on finalizing a site for an elevated storage tank at the north end of the City and was very close to securing that site. He advised that this project was considered by the Planning Commission and there were some objections regarding the site location. Staff believed that a new site had been worked out and this project would be brought forward in the next few months. Mr. Koenig informed members that the GOTP water system improvements were complete and the sanitary sewer system improvements were very near completion. He advised that the elevated storage tank had lagged behind slightly, but the top of the tower was now on. Mr. Koenig stated that the welds on the bowl of the tower would be finalized and the project would be moved to completion this fall, which would help finalize all of the Garrison Oak projects. He indicated that the curb line had been poured in the back section.

Mr. Koenig indicated that a new deep well at Schutte Park had been completed and back-up generators had been put into place. He advised that there had been several Inflow and Infiltration (I&I) projects that were completed throughout the system. Mr. Koenig stated that, in general, staff had caught up or was making good progress on catching projects up and getting into current year money, versus funds that had lagged behind for a while.

With reference to the Electric Department, Mr. Koenig stated that improvements to the Horsepond Substation were completed in FY 15 and Staff had been working on a system upgrade related to the new Energizer location. He indicated that the General Scott Substation project was now underway and he reiterated that staff was making significant progress in getting into the current year's money and projects, which had fallen behind. Mr. Koenig advised that the Electric Department completed the relocation of the 69 KV line, and staff was awaiting base paving and some additional moves from Verizon and Comcast to finish up that work.

In response to Mr. Hutchison regarding the time frame required to complete the water tower north of the City, Mr. Koenig estimated that it would take approximately one (1) year to construct.

Mr. Hutchison questioned how the City's long-term system appeared based on the current increased demand for water at Calpine. Responding, Mr. Koenig advised members that Calpine block one (1) had been in operation all summer and the City had managed the demand of Calpine and the rest of the system with the existing well system and elevated storage tanks. He noted that there had been significant volume changes in the tanks. To Mr. Koenig's knowledge, no complaints about pressure had been received across the City, which was good news. The additional tank at the Garrison Farm would take the City from about 3.75M gallons of elevated storage to 5.25M gallons, since the tank would hold 1.5M gallons. This would take care of all demand related to the future build-out of the GOTP. Mr. Koenig advised that the additional 1.0M gallons being discussed on the north end of the City would increase storage to 6.25M gallons. He explained that the purpose of the additional elevated storage was to allow for water supply for a fire in a worse case scenario. Mr. Koenig stated that, from an everyday operating standpoint, the system would be over-built; however, the towers are built to allow for response to an instantaneous emergency or severe fire demand at the worst possible time during a hot summer. He advised members that after going through all the engineering calculations and building the systems to all of those variables, the end result is pretty significant additional elevated storage, and he anticipated that those features would be in place by the end of 2016.

Mr. Koenig stated that if block two (2) of Calpine were built, a need for elevated storage was not anticipated; however, additional drilling for water resources was anticipated. He noted that money was set aside in FY 16 to try and identify the location of that next well resource, and staff would be meeting with the Department of Natural Resources and Environmental Control (DNREC) shortly to discuss how to proceed from a regulatory standpoint, and then hopefully begin an investigation in design and construction over the next few years. Mr. Koenig indicated that the system had generally performed very well this summer, even when there were days with high heat during the week. He noted that his office had not received the number of complaints that he felt might occur when the full load at Calpine was turned on. Mr. Koenig stated that the water treatment plant on Long Point Road was acting as the buffer to supply water to the energy block. He noted that there had been significant demands on the system without negative repercussions, noting that Calpine, the City's power plant, and NRG Energy, Inc., had all been running at times. Mr. Koenig noted that there was a lot of water moving through the system currently, but this was good for the City for a number of reasons.

In response to Mr. Blakeman regarding the fact that the new well was a shallow well as opposed to a deep well, Mr. Koenig stated that the deep Piney Point well at Schutte Park was the newest well constructed as a replacement of a former Piney Point well. The allocation was moved from one (1) point of the system to another point and the well was drilled at basically the same depth.

Mr. Blakeman expressed his understanding that the City could not receive any more allocation for deep aquifer water. Responding, Mr. Koenig stated that the challenge was that the State wants the City to discontinue drilling in the Piney Point aquifer. Wells can be replaced, but they did not want to authorize significant new allocations. He advised that the State does not want to authorize additional allocations in the Cheswold aquifer because of the same issue, potential mining of the aquifer. Mr. Koenig explained that the concern about pumping from the Colombia aquifer, which is the unconfined aquifer out near Long Point Road, was that pumping that aquifer causes the potential intrusion of salt water, which would not be desired. He stated that when looking for the next well, the City may be in the Frederica aquifer, which is much deeper than the Piney Point well at about 250 to 300 feet. Mr. Koenig noted that there are many decisions to be made from a technical and administrative level before determining the next well. Staff had tried to develop the interconnections with Tidewater Utilities and other systems for drought protection and for the entire discussion about how to manage the resource. Mr. Koenig explained that the State was now requiring farmers to obtain allocation permits, and that the table is heavily weighed in the agriculturalists' favor. He indicated that agriculturalists' demands for hundreds of thousands of gallons are typically granted; however, if the City makes similar requests, they typically begin a negotiating process begins. Mr. Koenig noted that the State may grant a portion of the request, but then asks the City to take a portion of the allocation from other areas. In the past two (2) years, if the City had allocation permits that permitted production at 500 gallons per minute but production had been 450 gallons for the last 10 years, the State had requested that the permit be reduced to 450 gallons, stating that they would grant the extra gallons elsewhere. Mr. Koenig indicated that the State is very stringent with the overall umbrella of the system.

Mr. Koenig stated that there are approximately 22 wells in the entire system. If the City requested another permit or another well, adding a 23rd well would not mean that the State would take the City's limit from 10 Million Gallons per Day (MGD) to 11 MGD; they may leave it at 10 MGD and just approve another well. He indicated that many discussions were going on internally to determine how to manage this resource. Mr. Koenig advised that drinking water is a valuable resource and noted that the State recognizes its value. He stated that the City of Dover is in the State growth zone, and, at the policy level, the State wants development to happen in a way that they term "on system." Policies in years past have favored pushing developments and economic development to the municipalities, but this requires the appropriate allocations for water and sewer. Mr. Koenig indicated that it was somewhat of a moving target at the State to get all of those things to match up.

Mr. Blakeman noted that there were 31 projects listed in the report in progress and questioned the likelihood of them being carried over to the next budget year. Responding, Mr. Koenig advised members that some were intended to be multi-year projects. He noted that Self-Contained Breathing Apparatus (SCBA) was ordered for the Fire Department which did not come in by June 30, 2015;

therefore, this had to be carried over as a project in progress, and there was a handful of other projects that remained for similar reasons. He noted that some projects were simply behind and the City was not on target with every single project.

Mr. Blakeman stated that staff had done a good job cutting down on the backlog and expressed a desire that projects would not build back up again.

Mr. Koenig stated that funds for projects in the I & I funds do not dry up on June 30th, noting that these projects have to be rebudgeted, but funds are present.

Mr. Anderson thanked Mr. Koenig for good progress at Woodcrest Drive and Buttner Street, noting that constituents from these areas had contacted him with a very favorable review and he had not observed or heard about any flooding problems recently there. Mr. Anderson stated that he was glad to see some of I & I projects moving forward because the infiltration costs the City a lot of money, and the more that can be done, the better.

Mr. Anderson questioned whether Mr. Koenig was concerned that funds for some of the projects must be spent because of the possibility of the State trying to recapture unspent funds next year, noting that the State had tried to do this in 2008/2009. Responding, Mr. Koenig stated that his concern was with regard to State funding related to the street program. With the budget increases in FY 16, Council brought the City street program up to $1M. He felt it was important for the City to keep the community transportation projects tight administratively, in terms of getting them authorized, completed, and reimbursed. Mr. Koenig explained that the State legislature had indicated that Community Transportation Funds may be significantly cut next year, and this would affect the City's ability to do some specially requested street projects. He noted an additional concern that if Municipal Street Aid were cut, the City would have to tailor back the street program from $1M to make up for some of this funding. Mr. Koenig indicated that this was not a concern for the FY16 budget but was a concern for FY 17. He indicated that if there were State revenue cuts to local governments, the City would be looking at capital project cuts and potentially operational cuts.

Mr. Anderson indicated that he had heard talk about some devolution to local governments but no talk about money going with that. In response, Mr. Koenig stated his thought that this would be debated significantly over the next year. He indicated his hope that if revenues do go away, that this would occur on a horizon that the City can plan for rather than immediately, since the immediate pullback of those revenues would cause the City to reconsider some of the capital projects.

Responding to Mr. Anderson regarding the reason for the delay on the Lincoln Park project, Mr. Koenig indicated that the money afforded for this project was related to design. He explained that there was a conceptual design for the project; however, one (1) of the reasons that the project had not progressed was because of the fairly significant construction cost and because no one had yet been identified who was interested in building in that area. Mr. Koenig stated that if a private developer was willing to take on some of this project, they may elect to construct the road or

improvements privately, and they would not be under wage rate requirements. He advised members that a public-private partnership to build out the concept would likely not require the City to borrow money to go forward to construction. Mr. Koenig explained that the grant that the City received was for design and planning. In regard to the potential purchase of property, he felt the federal guidelines would become another obstacle that must be managed, since construction as a federal project would require a different set of rules than those for a private developer or if the City were to take on the land acquisition for it. Mr. Koenig stated that if the project was done through a grant, there are special rules for land acquisition, business relocation, and home relocation, and it would become a very burdensome project to undertake. Assistance would be needed from the Delaware Department of Transportation (DelDOT), including their expertise in land acquisition, to move it forward as a joint federal, state, and local government project. Because of the uncertainty about what would be done with this area, staff had not asked for construction money at this point.

Mr. Anderson questioned how the new prevailing wage structure would benefit the City. Responding, Mr. Koenig advised members that the State relaxed some of the prevailing wage guidelines for public works projects related to Community Transportation Funds, and staff was waiting for written guidance. His understanding was that there was a new threshold at the State level for the kicking in of the State prevailing wage for community transportation. Mr. Koenig stated his belief that the threshold was approximately $250,000, noting that he needed to confirm this figure. He explained that a City road project valued at $100,000 funded solely with community transportation funds would be below the threshold. Mr. Koenig noted that this would help with projects such as the Inner City Cultural League, the Solid Rock Church, and some individual road projects, since the prevailing wage would not be required under the new rules, which would result in potential savings.

Mr. Blakeman moved to recommend acceptance of the report as presented, seconded by Mr. Neil and unanimously carried.

TEA/NAES Report *(June)*

The TEA/NAES Monthly Report for June 2015 was provided to members to enable them to monitor electric sales and revenues received, which will provide a better understanding of any fluctuations that occur and allow the opportunity to make improvements if deemed necessary.

Mr. Scott Koenig, City Manager, noted that the monthly reports received in the 11th and 12th months of the year are the most important. He felt that the City had a pretty good year overall regarding its power supply and hedging program efforts. Referring to Page 13 of the report, he noted that year-to-date information, which reflects the 12-month period, indicated a budgeted gross load of 744,332 MW and the actual was 757,247 MW; therefore, the City sold more energy than staff was preparing in the budget. Mr. Koenig noted that the Total - Utilities Cost reflected that the City had budgeted $49.4M and actually spent $47.8M. The City's load was higher than anticipated and the City came in under budget in power supply by about $1.5M. He reminded members that several years ago the City realized a multi-million dollar savings in this area because the City's hedges were coming off and the City was able to buy power at a lower cost. There was a similar condition

moving through this year, but there were some months that tended to fluctuate. Mr. Koenig noted that extreme cold weather during the winters of 2014 and 2015 resulted in some major swings in costs, and the City was able to overcome that over the 12-month period. He reminded members that the energy market is extremely dynamic, changing almost daily, which creates challenges in projecting for the future. Mr. Koenig advised members that hiring Mr. Harry Maloney, Electric Director, had provided additional perspective. He stated that Mrs. Donna Mitchell, Controller/ Treasurer, had been involved with this contract from the beginning and previously in the transition from PACE to TEA as the City's energy management provider. Mr. Koenig reiterated that he was happy where the year ended up, noting that staff expected that things would tighten up over the 12-month period, and they had, but the City had been faring reasonably well.

Responding to Mr. Hutchison as to how far out the City buys into the market, Mr. Koenig stated that the City was buying no more than five (5) years out and makes declining purchases over a five (5) year period. He stated that the City was just starting to purchase products for five (5) budget years out, which presents challenges in projecting the future.

In response to Mr. Hutchison, Mr. Koenig confirmed that when buying five (5) years out, the City is generally locked in. He noted that there may be a unique opportunity to sell and a deal is not finalized until the date is attained; however, the City is, for the most part, locked in when committing to these purchases.

Mr. Blakeman commented that if the City wanted to sell undesirable power, others would probably also find it undesirable.

Referring to the $1.9M total listed for hedge transactions in the Executive Summary on Page 2 of the report, Mr. Blakeman questioned if these funds were paid in the PJM bill or paid separately as a check to another party. In response, Mrs. Mitchell explained that hedges are paid separately to somebody else. The City has counterparties, such as Constellation, Macquarie, and BP, and the City pays whomever it has the hedges with for the month. She indicated that TEA makes sure that everything matches up and forwards the invoices to the City for payment.

Mr. Blakeman stated that he was having difficulty reconciling the purchase and cost information in the report, indicating that the Executive Summary on Page 2 listed a $1.8M purchase and energy charges of $898,169.44; however, the PJM bill for July was approximately $775,000, which was the amount that the City sent to PJM. He noted that the $1.8M purchase and $898,619.44 in energy charges were substantially higher than the $775,000 amount.

In response, Mrs. Mitchell explained that the PJM bill reflects both sales and purchase transactions. When PJM is paid, the City pays them the net of the credits and the debits on the bill. The net at the end of the year should be the total of all the weeks' bills, which is the final bill for the month. She indicated that on a weekly basis, it may go one way or another, reflecting a payment in week one (1) and a credit in week two (2). In the final week of the month, PJM provides a total bill that trues up all transactions, and the net of all debits and credits is what the City pays.

Mr. Blakeman reiterated the problem that a total of approximately $1,866,000 was reflected in purchases and fees from PJM, but the bill came to $775,000. Responding, Mrs. Mitchell stated that the credits that the City receives for its load reduces what the City pays PJM.

Mr. Blakeman stated that he would like to see an explanatory reference if the City is paying substantially less, because he was not able to reconcile the report with the bill.

After additional discussion, Mrs. Mitchell referred to page 11 of the TEA report. She explained that the items included in Power Supply at the top of the report, such as the PJM - Energy, Congestion, and Losses and PJM - ARR, Transmission and Fees, and PJM - Capacity UCAP Obligated Purchased, reflected the purchases from PJM, such as the $1.8M total referenced previously. Mrs. Mitchell stated that the Power Generation Non-Production Revenue listed near the bottom of Page 11, listed on this spreadsheet as totaling approximately $930,666, reflected the net amount billed, such as the $775,000 mentioned previously. She explained that the $1.8M in the Executive Summary was based on the power supply in the top section and is not netting against the capacity credit.

Mr. Blakeman indicated that this was his concern since the larger number was being used to calculate the cost of kWh or MWh of power, and if only an amount in the neighborhood of $775,000 was being paid, the cost per MWh should be lower than using the $1.8M.

Mrs. Mitchell stated that, as presented on page 11, the power supply MWh cost is netted against the credit for power supply generation to offset the City's credit, providing the net MWh cost, which is the true cost.

Mr. Blakeman suggested that lower number would be a better number to put in the Executive Summary, as opposed to using the $1.8M as a calculation, to show the actual cost per MWh of purchasing power.

Mrs. Mitchell explained that this is the power supply piece and stated the need to look at the terminology used by TEA. The generation credit is the City's production credit piece. TEA provides amounts for the power supply, the generation credit, and the net cost for the month.

Mr. Blakeman stated his belief that the City was actually paying $775,000, not $1.8M, and if the kWh's from this report were divided to show the cost per kWh or MWh, a higher cost would be reflected than if the net number were used. His concern was that the City was reflecting a higher cost per kWh or MWh than if the $775,000 number, which he felt was the real number, were used.

Mr. Blakeman felt that this was something that should be looked at.

Mr. Blakeman moved to recommend acceptance of the report as presented, seconded by Mr. Neil and unanimously carried.

Updates

Green Energy Funding and Programming

Members reviewed details regarding Green Energy Funding and Programming.

National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) Permit

No update was provided.

Garrison Oak Technical Park Project Updates

Mr. Scott Koenig, City Manager, provided the following updates:

City Infrastructure/Calpine Energy Center

From a utility standpoint, projects at the Garrison Oak Technology Park (GOTP) would be coming to an end over the next couple of months and a final cost would be determined and reported to Council. Mr. Koenig expressed his belief that these projects were right about at budget; however, the electric relocation was about $50,000 under budget. He indicated that the City was beginning to see a return on its investments. The Calpine facility was occupied and producing energy out of block one, and Calpine was a large water user and fairly large sewer customer. It was Mr. Koenig's belief that the Uzin Utz facility had received its temporary certificate of occupancy and was beginning to ramp up for a full operation shortly. He expected that these facilities would have opening dedications in September and October and staff was continuing to market the balance of the park, having committed to a sale for one (1) parcel in addition to the Uzin Utz and Calpine facilities. Mr. Koenig advised members that there was additional activity in the GOTP for those interested in relocating or building new businesses there and that staff was very happy with the GOTP's standing in this regard.

Mr. Koenig stated that infrastructure comes to a close, the FY 15 and FY 16 total City budgets were close in numbers. He noted that the operating budget was becoming more expensive and the capital budget decreased slightly as the City was progressing through a spike in cost associated with the development of the GOTP.

In regard to the budget, Mr. Anderson questioned if the surplus would go toward the power supply, to pay back funds, or to the reserve. Responding, Mr. Koenig stated his belief that funds saved through the purchase of energy would go into the Rate Stabilization Fund, rather than the operating budget, to help with potential future increases or levelization of future power costs or power cost adjustments.

In response to Mr. Anderson, Mrs. Mitchell confirmed that these funds were not accounted for in the budget that was just passed by Council.

Dover Sun Park

Mr. Scott Koenig, City Manager, reviewed a spreadsheet entitled "City of Dover Electric Revenue Fund - FY 15 - White Oak Solar Park Incremental Cost." He advised members that numbers were provided through June 2015, and the incremental cost of the solar park to the City's ratepayers was approximately $909,000 for the year. Mr. Koenig stated that the City pays a premium for solar energy; however, it is required to diversify the City's portfolio. He advised members that the

challenge was how to make this work for the City in the long run. Mr. Koenig noted that there had been some instances during months with extreme temperatures when power coming off the solar park was cheaper on a monthly basis than what was being bought off the grid, which he had not expected. He advised members that the reality was, moving forward, that the City would have to invest more in solar and other renewable energy projects to comply with Renewable Portfolio Standards (RPS) standards and to diversify its portfolio. He noted that these costs would be higher, but this must be done to maintain the utility.

Mr. Neil moved to recommend acceptance of the updates as presented, seconded by Mr. Blakeman and unanimously carried.

Mr. Neil moved for adjournment, seconded by Mr. Blakeman and unanimously carried.

Meeting adjourned at 5:55 p.m.

James L. Hutchison, Sr.
Chairman

JLH/TM/js/dd
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Attachments
Attachment #1 - Revised Governing Policy for Energy Commodity Risk Management

City of Dover, Delaware

Governing Policy

For

Energy Commodity
Risk Management

Effective: August 24, 2015
(Subsequent to Council approval)

Approved by: City of Dover Council

Date: August 10, 2015
(Last Revision June 19, 2014)

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PURPOSE OF THE RISK MANAGEMENT POLICY

A. Introduction

The City of Dover ("**City**") and its customers are routinely exposed to energy price risk, volume variability risk, basis risk and credit risk – herein referred to collectively as energy commodity risk - in the normal conduct of serving its electric load requirements. Volatility of energy commodity prices and volumetric uncertainty (either supply/generation or load obligations) impose a substantial and direct risk to the City's financial and operating performance.

By authority of its charter, the City has responsibility for overseeing the City's electricity operations, including the management of its cost of serving Dover's customers. By agreement dated May 6, 2011 and approved by the City (the "**EMA**"), the City has engaged The Energy Authority, Inc. ("**TEA**") to assist the City with Asset Management and Strategic Planning Services, Risk Management Services, and Energy Management Services.

This Policy for Energy Commodity Risk Management ("**Policy**") is established the explicit understanding that the City has retained and delegated responsibilities to TEA to provide Risk Management Services.

Additionally, the City has issued this Policy for dealing with the philosophy, framework and delegation of responsibilities necessary to govern activities related to Dover's energy commodity risk management. As set forth herein, the City has established an organizational structure, delegated responsibility and established internal controls and procedures to ensure that all transactional and oversight activities are conducted in compliance with this Policy and in accordance with the City's normal reporting, legal, financing and regulatory requirements relating to energy assets and transactions.

B. Scope of Policy

This Policy covers all transactions entered into the by the City of Dover designed to meet the City's electric load requirement and the management of risk related to these transactions.

In the event of conflict between this Policy and the EMA, the Policy shall control. This Policy is separate and distinct from enterprise risk management policies and procedures addressing the City's safe operation of its generating stations and energy infrastructure, insurance requirements, permit compliance, employee matters regulatory compliance with laws and regulations of the State of Delaware and Federal

Agencies such as EPA, FERC, NERC and CFTC or other potential risks to the City beyond the purchase and sale of fuel and electric power and its ancillary products.

C. Objectives and Risk Philosophy

The objectives of the Policy are to identify energy commodity price and credit risk exposures and give the City a framework for the quantification and management of these exposures. The Policy will identify the reports needed to convey how the identified risk exposures can potentially impact the City's overall cost of providing electricity service to its customers and report on the risk management of the transactions associated with City's electric load requirements.

Under the Policy, risk management activities will be conducted consistent with the City's overall objective of appropriate risk mitigation. There are several objectives of the Policy which, when taken and executed together, serve to manage the City's energy commodity price exposures. Specifically, the Policy:

- Establishes framework for developing credit limits for counterparties and quantifies and manages the credit exposures related to potential counterparty abrogation
- Quantifies the impact of the above exposures on City's financial results
- Manages the impact of the above exposures in line with the City's identified level of risk tolerance
- Provides clear delineation of responsibilities and authority, outline a separation of duties, and ensure reporting of risk is timely and accurate.
- Ensures that the impact of any action affecting the City's position is consistently quantified, monitored and authorized.

The City's risk management activities will be conducted consistent with its overall objective of appropriate risk mitigation and never for purposes of speculation.

D. Policy Administration

This Policy has been approved by the Executive Risk Management Committee and The Utility Committee of the Dover City Council. The Utility Committee must approve modifications to the Policy with the exception of the appendix information which can be modified with the approval of the Executive Risk Management Committee.

MANAGEMENT AND CONTROLS

This Policy articulates the management and organization of the City and TEA to serve as a control framework outlining delegation of duties and responsibilities.

A. Utility Committee of The City Council

The Utility Committee of The City Council (The Committee) has a responsibility to provide approval of this Policy. With this approval, The Committee also assumes additional duties. They will understand the risks the City is and could be exposed to due to their energy commodity risk management activities. In this role, the Committee will have a responsibility to also understand the City's policies and procedures, internal controls and systems which are used to help manage the City's energy commodity risks.

The Committee will approve any amendments to the Policy or limits within. The Executive Risk Management Committee will update the Committee periodically regarding the Policy and its functions. It will be the Committee's responsibility to:

- Discuss guidelines and strategic policies that govern the process by which the Energy Risk Management Committee assesses and manages risks
- Review and approve the risk policy at least annually
- Approve new members of the Executive Risk Management Committee
- Acknowledge the risk inherent in transactions covered under this Policy

B. Executive Risk Management Committee

An Executive Risk Management Committee ("**ERMC**") has been formed to provide executive management oversight for the City's energy commodity risk management activities. The ERMC is charged with the creation, amendment and administration of this Policy, including acquiring any approvals required by the Utility Committee, and will ensure that all energy commodity risk management activities of the City are performed consistent with this Policy. The ERMC will meet at least monthly to review compliance and conduct its business as described in this Policy.

The ERMC shall be comprised of the following voting members: The City Manager, The Director of Utility, The City's Controller and TEA's Client Service Manager.

The City's ERMC will make decisions following the process outlined in this Policy. TEA's Client Services Manager may include representatives from other areas within TEA in the monthly ERMC meetings who will attend in person or by conference call as non-voting advisors. Other City employees and TEA staff may also be asked to attend

meetings from time-to-time, as the ERMC deems necessary. The responsibilities of the ERMC shall include:

- Establish scope and frequency for management reporting to the Utility Committee.
- No less than annually, review the City's Energy Commodity Policies and Procedures for correctness and completeness.
- Review and approve any new risk report or change to an existing risk report provided by TEA to monitor risks outlined in this Policy.
- Understand and approve any models, methodologies, and assumptions used for measuring risks such as volume risk, process risk, counterparty risk and commodity risk.
- Monitor the City's risks and ensure they are within the limits and are being managed according to what is indicated within the City's Policy and associated procedures
- Understand the City's risk management objectives and risk tolerances.
- Review and approve the risk management and trading strategy programs and associated risk. Each program should be reviewed to ensure alignment with Policy objectives and compliance with risk limits within this Policy.
- Periodically review any risk management program approved in light of recent market changes, and ensure continued compliance with its established guidelines
- Review and approve new products, markets, trading counterparties and credit limits
- Review all violations and exceptions to this Policy and report such to the Committee.
- Approve the individuals or companies that engage in the City's commodity transactions and are subject to the limits within this Policy.
- Ensure that the individuals or companies authorized to transact on behalf of the City as well as manage its risks, are appropriately trained and qualified.
- Ensure independence and segregation of duties between front, middle and back office at TEA.
- Recommend changes to this Policy to the City's Utility Committee for approval and ensure the Utility Committee understands the City's overall compliance with this Policy and associated procedures.
- The ERMC will meet at least monthly to review risks identified and reported on by the Policy, this meeting shall be chaired by The City Manager. Minutes of each meeting of the ERMC shall be recorded and reflect any decisions and follow-up action items to be performed. These minutes will be reviewed and approved by the members of the ERMC in a timely manner.

Each member of the ERMC has a unique role as defined below:

1. City Manager

The City Manager is independent of all commercial functions and carries the responsibility of establishment and maintenance of risk management for the City. The City Manager will be a voting member of the ERMC and act as a chair of the ERMC. Other responsibilities include:

- Ensure this Policy is maintained.
- Oversee reviews of the City's energy commodity risks, limits, risk measurement methodologies and models, and programs and recommend changes to the ERMC.
- Ensure potential transactions and their impacts on the City's risks and limits defined within this Policy.
- Develop and monitor the implementation of the Policy, and oversee other risk management processes and procedures established by this Policy or otherwise by the ERMC.

2. Director of the Utility

The Director of the Utility is responsible for all trading, hedging, pricing, structuring, and market and operational risk management activities associated with the City. The Director of the Utility will be a voting member of the ERMC. Other responsibilities include:

- Review the effectiveness of transaction processing systems and procedures relating to risk measurement.
- Recommend operational risk and business risk assessment guidelines.

3. Controller

The Controller is independent of all commercial functions and carries the responsibility of the City's accounting practices. The Controller will be a voting member on the ERMC. Other responsibilities include:

- Perform financial accounting including accounting for hedging and derivatives activities.
- Comply with tax rules and make appropriate tax elections.
- Record realized and unrealized gains and losses.
- Reconcile general ledger, cash transactions and margin accounts.
- Implement tax-hedge accounting policies and other regulatory tax requirements.

- Develop and maintain documentation outlining standard procedures for conducting business.
- Invoice counterparties and resolve billing disputes.
- Perform daily/weekly/monthly transaction checkout with counterparties.
- Develop and maintain documentation outlining standard procedures for conducting business.

4. TEA Client Services Manager

The TEA Client Service Manager roles and responsibilities are defined exhibit B of the EMA between the City and TEA. The TEA Client Service Manager will be a voting member on the ERMC. Other responsibilities include:

- Monitor risk reports between ERMC meetings.
- Report to the Committee and the ERMC on the City's adherence to all limits and functions within this policy.
- Engage the ERMC in discussions regarding events or developments that could expose the company to potential losses.
- Recommend to the ERMC specific risk limits consistent with the City's risk management objectives, risk tolerance, and risk management policy.
- Coordinate and distribute independent market fundamental analysis.
- Provide advisory support and recommendations as specified in Article 5 of the EMA.
- Update RMC on training of TEA employees.

DISCUSSION OF RISKS

This Policy covers the management of all material energy market risks faced by the City. A comprehensive list of risks that are or could be relevant to City is shown in Appendix C of the Policy. Among the most critical of these risks are commodity risk, counterparty risk, process risk, volume risk, and budget risk. These risks are measured by the limit structure and controls outlined in the Policy.

Commodity risk represents the potential adverse impacts to the value of the City's portfolio due to changes in the market. Commodity risk encompasses volatility risk, forward price risk, basis risk, correlation risk and liquidity risk.

Counterparty risk represents the potential losses the City could incur due to delivery risk and receivable risk. Delivery risk stems from a supplier or trading counterparty that is unable or unwilling to perform on its commitments including but not limited to delivery or receipt of commodities. Receivable Risk includes the City's risk associated with a counterparty's timeliness of payment for services rendered.

Process risk represents the risks associated with process problems including, but not limited to, inaccurate data capture, untimely trade execution or settlement problems. Controls over process risks are embedded in the organizational structure of TEA through the design processes and operating procedures.

Volume Risk represents the potential for unforeseen changes from projections of excess or shortfall of capacity or energy from the actual needs. When variances are large coupled with large costs to transact and adverse moves in market prices this risk could be realized. In management of this risk, the City must be aware of the fact that unexpected variations in volume are often highly correlated with price movements.

Budget Risk represents the potential to deviate outside of tolerable bounds of the City's budget. Deviations from budget can be caused by forecast error or unforeseeable adverse changes in market prices.

Regulatory Risk arises from participation in regulated markets. With the Independent System Operator (ISO) implementation of Federal Energy Regulatory Commission (FERC) Order 741, the City faces increasing regulatory risk when participating in wholesale energy markets. The TEA Compliance department works in conjunction with the TEA Risk Control department to help the City manage regulatory risk. Regulatory risk is managed by:

- Annual Compliance Training for all employees participating in regulated markets;
- Integration of the appropriate compliance culture within the Trading department through ongoing interaction between Compliance and Trading;
- An independent monitoring and exposure measurement on transactions that could trigger an increase in regulatory risk.

MARKETING AND TRADING PRACTICES

A. Standards of Conduct

Individuals authorized to transact for the City shall not misrepresent, conceal or withhold information regarding energy commodity trading and risk management transactions to any person responsible for the accurate recording and/or reporting of such transactions; participate in any such transaction or similar activity for the benefit of any party other than the City; or hold or be a beneficiary of any financial interest in any entity with which the employee is engaged in trading or other business activity (other than ownership of an interest in a mutual fund managed by another party). Further, no employee authorized to place or execute such transactions may engage in trading power or energy commodities derivative instruments for his or her personal account.

B. Products, Activities and Limitations

Pursuant to achieving the City's core objectives for the purpose of energy commodity risk management, the following limitations shall apply.

- Permissible instruments will be restricted to the products and instruments specified in Appendix A – Approved Products of the Policy;
    - All physical forward transactions shall be governed by the Edison Electrical Institutive (EEI), North American Energy Standards Board (NAESB), or similar agreements with counterparties approved by the City.
    - The City reserves the right to enter into financial hedge transactions to effectuate Policy objectives, but does not authorize TEA to enter into financial hedge transactions on its behalf. Any such financial transactions that the City may enter into shall be governed by ISDA agreements with counterparties as approved by the City.
- The maturity for each permissible instrument will be restricted to the maturity limits specified in the risk limits section of the Policy.
- Transaction volumes for each risk management transaction will be restricted to the amounts specified in the Risk Limits section of the Policy.
- Risk management transactions will be outlined in the ***City of Dover Hedge Program*** which will be approved by the ERMC. Risk management transactions may include the following:
    - Hedging the forward price of purchased power for delivery to the City as needed to meet its electric load requirements.
    - Hedging the forward price of natural gas and fuels as needed to generate power to meet the City's electric load requirements.
    - Unwinding of hedges to accommodate changes in expected load requirements, or for economic reasons subject to explicit constraints set by the ERMC.

C. Contract Documentation and Confirmations

No over-the-counter transaction may be executed until an EEI, NAESB, or similar agreement has been authorized by the City, approved by the ERMC and fully executed by the parties.

Written confirmations will be required from counterparties, as defined in the Master Service Agreement between the City and counterparty, within one business day or such longer time as required by the contract in question for all risk management transactions. Contemporaneous with any commitments and prior to receipt of written confirmations, verbal commitments shall be memorialized internally as to instrument structure, quantity, relevant time horizon, price and any other relevant terms; such internal

documentation shall be time stamped and correlated to the ultimate written confirmation to or from the counterparty. Both the internal documentation as well as the written confirmation from the counterparty shall be provided to TEA's Risk Control Group immediately upon receipt for verification.

In the event that there is a material failure to provide timely documentation or confirmations, then at the City Manager's sole discretion, the offending individual's authorization may be suspended. Similarly, if the failure to provide timely documentation or confirmations is due to the failure of counterparty, then at the discretion of the City Manager, a moratorium may be imposed on transactions with that counterparty. In such cases, the City Manager shall notify the ERMC of the issues leading to the suspension or moratorium shall.

Nothing herein shall inhibit the City Manager from bringing control issues to the TEA's Client Services Manager prior to a decision on materiality or the imposition of a suspension of trading privileges or counterparty moratorium.

D. Training

The ERMC will ensure that all City employees and/or TEA Staff that will execute transactions on behalf of the City will have appropriate training in the markets in which the transactions occur.

E. New Product Protocol

As required to manage the City's energy commodity risk the ERMC shall approve new products provided the requirements of the ***New Product Approval Procedure*** are met.

RISK LIMITS AND RISK MEASUREMENTS

A. Limits

The limit structure is designed to quantify the types of risk in City's energy commodity portfolio. The City will manage and report on its energy commodity market risk using Volume/Maturity/Value Limits, a Cost of Service Limit and a Hedge Loss Limit.

1. Volume/Maturity/Value Limits

Transaction limits for the Individuals Authorized in Appendix E to execute transactions and the maturity limits for each permissible instrument are listed below. Transactions for amounts in excess of those listed may be executed only upon approval

of the ERMC. This limit, maturity and value structure is not intended for use when transacting day-ahead and real time in the PJM market.

Volume/Maturity/Value Limits		Maximum Daily Notional Limits	
		Volume	Value ($000)
Power (MW) Hourly Limit	Balance of the Month through 12 Months	50	20,000
	Between 13 Months and 24 Months	50	20,000
	Between 25 Months and 36 Months	25	10,000
	Between 37 Months and 48 Months	25	10,000
	Between 49 Months and 60 Months	25	10,000
Natural Gas (MMBtu) Monthly Limit	Balance of the Month through 12 Months	30,000	400
	Between 13 Months and 24 Months	30,000	400
	Between 25 Months and 36 Months	10,000	200
	Between 37 Months and 48 Months	10,000	200
	Between 49 Months and 60 Months	10,000	200
#2 Fuel Oil (Bbl) Monthly Limit	Balance of the Month through 12 Months	6,000	400
	Between 13 Months and 24 Months	6,000	400
	Between 25 Months and 36 Months	3,000	200
	Between 37 Months and 48 Months	3,000	200
	Between 49 Months and 60 Months	3,000	200

The amounts in the table above refer to the maximum volume of orders that can be placed in any one day the individuals authorized to conduct trades for the specified time period. On any one day the maximum transaction volume placed can be for up to 50 MegaWatts per hour for every hour during a single calendar month (including both on-peak and off-peak hours), OR 25,000 MMBtu per month for all months pertinent to the natural gas transaction, OR 6,000 Bbl per month for all months pertinent to the oil transaction.

2. Delegation Authority

The Utility Committee delegates the following approval authority limits to the Dover ERMC. The ERMC may delegate these authorities to individuals authorized to commit Dover to financial obligations.

Position	Maturity Limit	Term Limit	Notional Value Limit
Dover ERMC	5 years	5 years	20,000,000

3. Volume Limits

For no reason should a transaction be executed that exceeds the City's electric load requirements. If there is an adjustment to the City's electric load requirements and the existing transactions greater than 100% of the adjusted electric load requirements the ERMC will review and approve the offsetting strategy deployed in sufficient proportion to mitigate the encroachment.

4. Locational Limits

Non-Commodity Transactions must support the requirement of one of the City's generation units, native load or transaction locations.

B. Stress Testing and Back Testing

The City's positions shall be periodically stress tested and models shall be back tested. The processes around these tests are outlined in the ***Stress Testing and Back Testing Procedure***.

C. Instances of Exceeding Risk Limits

Should the City or TEA enter into a transaction that causes the portfolio to exceed any above mentioned limits the Director of the Utility shall, in addition to notifying the ERMC, also notify the Chair of The Committee as soon as practicable and shall provide periodic reports to the Chair on the status the transactions for as long as the City is exceeding its limits. The ERMC will review and determine whether any liquidation or offsetting of transactions is warranted. The incident will be documented as a Policy Exception by the Director of the Utility.

CREDIT POLICY

Credit Risk is the risk due to the uncertainty in a counterparty's ability to meet its contractual obligations. The primary objective of this credit policy is to mitigate, to the extent commercially reasonable, the credit risks associated with transactions covered in this Policy while still allowing the City to achieve its objectives.

A. Measuring Credit Risk

The status of credit risk will be measured and reported through reports provided by TEA.

The current credit exposure will be reported at the agreement level via a Counterparty Credit Report provided by TEA. This information will be made available in real time to TEA trading personnel so that it can be checked prior to executing transactions for the City. Those responsible for risk oversight at the City and TEA will have access to this information no less frequently than once per day. The ERMC will monitor overall credit utilization and any credit exceptions at least monthly. When measuring the current credit risk, netting will be applied to the exposure if the City's contract with a counterparty includes provisions for netting.

B. Analysis and Extension of Credit Limits

Physical and financial commodity transactions will be executed with counterparties approved by the ERMC with credit available to support the transactions. The creditworthiness of a counterparty will be determined by both qualitative and quantitative factors. Factors shall include, but not limited to:

- A company's debt credit ratings provided by the rating agencies.
- Financial data such as an analysis of the income statement, balance sheet, and cash flow, as well as liquidity and capital structure.
- Subjective factors such as company's fuel diversity, overall size, risk management policy and internal controls, geographic diversity, and market intelligence.

A credit limit is the amount of unsecured credit granted to a counterparty. Unsecured credit exposure includes amounts owed by the counterparty, whether billed or not, and the mark-to-market differences in value of any collateral which the counterparty has provided the City. Any net exposure above the collateral threshold will require the posting of collateral by a counterparty. Further information on the City's procedure for establishing credit is contained in the ***Counterparty & Credit Review Process***.

Collateral thresholds, term limitations and credit exposure limits will be subject to the maximums indicated in Appendix B, based upon the lower of the S&P and Moody's credit ratings.

At no time will the City incur a credit exposure with any counterparty greater than $60,000,000.

C. Instances of Exceeding Credit Limits

The City and TEA are restricted by the credit limits approved by the ERMC. The ERMC can suspend trading with a counterparty, if that counterparty's credit limit has been reached or exceeded. **The City or TEA traders shall not exceed the Counterparty Credit Limit by executing transactions with any counterparty without approval of the ERMC.**

The ERMC will determine when it's appropriate to require additional collateral if a counterparty's credit exposure exceeds its credit limit. Collateral includes standing letter of credit, cash, and prepayments.

All credit exceptions will be documented and reported to the ERMC and the Committee as Policy Exceptions.

REPORTING

A. Risk Reporting

Preparation of timely reports is critical to monitoring risk. TEA will furnish the required reports on a regular frequency for the City in a format acceptable to the ERMC. In addition, the ERMC and its designees will be provided access to the City's risk reports as updated daily via TEA's secure Web Portal.

Reports required on a monthly basis and for periodic meetings of the ERMC include the following:

- **Profit and Loss Report**

The Profit and Loss (P&L) Report shows the daily realization of transactions at either the transaction price or the market price as transaction roll from unrealized to realized. This report should show volumes, transaction prices and market prices of realized physical and financial power and fuel transactions.

- **Mark to Market Report**

The Mark to Market ("MTM") Report conveys the potential transaction exposure, of all existing forward transactions executed, if the energy commodity portfolio was liquidated at the most recent market settlement prices. This report should show volumes, transaction prices and market prices of unrealized physical and financial power and fuel transactions.

- **Daily Activity Report**

The Activity Report presents a summary of the day's trades executed in the bilateral energy market.

- **Cost of Service Report**

The City's exposure to energy price risk shall be monitored and reported on a Cost-of-Service basis. All calculations are at the wholesale level. The Cost-of-Service recognizes all prior (expired) months within the Power Year on the basis of actual (incurred) costs, and recognizes all forward (pending) months within the Power Year on the basis of expected forward power and fuel prices and expected forward load-following risks. As defined below, the Cost-of-Service is an aggregation of Forward Energy Commodity Portfolio Cost, the Load Following Cost Expectation and the City's Budget Target for Purchase Power Expense.

  - The Net Purchased Power Cost shows the net cost of all physical and financial transactions related to the City's anticipated commodity requirements for power and fuel and is based on the price of all hedge transactions plus the forward market price of all unhedged transactions valued at current forward prices for

energy commodities, customer-level cost per MWH of all physical and financial transactions related to Dover's actual plus anticipated energy.

- The expected fixed costs defined as load-serving entity (LSE) capacity costs, transmission costs and TEA management fees.
- The Expected Load-Following Cost for a specified power year is defined as the expected cost (or revenue) associated with intra-month load variations due to weather or other events affecting demand. As an interim measure due to lack of necessary market information and the rapid evolution of the PJM RTO market, the ERMC has specified $2.50 per MWH as an estimate of the Load Following Cost to be used for estimating the City's Forward Cost-of-Service Report. The ERMC will update the Expected Load Following estimate while lack of necessary market information persists no less than annually.
- The Budget Target for Purchase Power Expense represents the City's view of expected purchase power expense.

B. Credit Reporting

- **Counterparty Credit Report**

The Counterparty Credit Report conveys the exposure to all counterparties with which the City has credit exposure resulting from its energy commodity risk management activities.

- **CFTC Reporting**

The City understands that transacting over the counter (OTC) swaps carries an additional Commodity Futures Trading Commission (CFTC) reporting function. Once required by the CFTC, the City will report on how the City generally meets its financial obligations associated with entering into non-cleared swaps in a manner acceptable to the CFTC.

C. Hedge Effectiveness Reporting

If the City's transactions require a hedge effectiveness test, those testing results will be reported to the ERMC no later than one month after the end of the financial reporting period. The report will include a summary of testing methodology, assumptions of the testing and the outcome of results with a pass or fail by transaction.

INFORMATION TECHNOLOGY SYSTEMS

Since information systems play a vital role in The City's trading abilities, the City shall ensure that the information systems and technology used to store all transaction information is maintained and secure. The City's transactions will be stored in TEA's enterprise trading and risk management system. TEA uses the TriplePoint Commodity

XL (CXL) system, integrated with Commodity XL for Credit Risk (Credit Risk). TEA has assigned a Database Administrator (DBA) that is charged with the database security and maintenance for the transaction database, CXL.

The following safeguards for data security and backup will be installed:

- Transaction data stored in the system of record will be replicated daily to ensure data redundancy;
- The CXL database will be backed up at least daily after the close of business.

POLICY DISTRIBUTION AND COUNSEL

A. Distribution Outside The City

The City's Policy is restricted to the use of the City and TEA organizations. It shall not be distributed outside these organizations without the consent the ERMC.

B. Designated Counsel

Questions about the interpretation of any matters of this Policy should be referred to ERMC. The ERMC will provide clarification and explanation on any updates to this Policy.

All legal matters stemming from this Policy will be referred to the City's Legal Counsel.

APPENDIX A – Approved Products

The following shall constitute a list of approved products to be utilized by TEA to manage the City's energy commodity portfolio:

- Physical Power
- Physical Natural Gas Delivered Dover via Eastern Shore Pipeline
- Physical Residual Fuel Oil (#2) Delivered Dover
- Capacity
- Financial Power
- Financial Call Option
- Financial Put Option
- PJM Demand Bids and Generation Offers
- PJM InSchedules
- PJM Transmission Products
  - Financial Transmission Rights
  - Annual Auction Revenue Rights
- PJM Tier 2 Synchronized Reserves

The above instruments can be executed by TEA on behalf of the City of Dover for the current and next two successive Power Years (July to June).

APPENDIX B – Approved Counterparties and Threshold Tables

This Appendix establishes approved counterparties and their Collateral thresholds. Collateral thresholds, term limitations and credit exposure limits that are subject to the following maximums based upon the lower of the S&P and Moody's credit ratings:

Credit Thresholds from Dover Extended to the Counterparty

Constellation Energy

Threshold	S&P	Moody's
$ 60,000,000	AAA	Aaa
$ 50,000,000	AA- to AA+	Aa3 to Aa1
$ 50,000,000	A- to A+	A3 to A1
$ 40,000,000	BBB+	Baa1
$ 30,000,000	BBB	Baa2
$ 20,000,000	BBB-	Baa3
$ -	Below BBB-	Below Baa3

Integrys

Threshold	S&P	Moody's
$ 20,000,000	AAA	Aaa
$ 20,000,000	AA- to AA+	Aa3 to Aa1
$ 15,000,000	A- to A+	A3 to A1
$ 10,000,000	BBB+	Baa1
$ 5,000,000	BBB	Baa2
$ 1,000,000	BBB-	Baa3
$ -	Below BBB-	Below Baa3

Sempra Energy

Threshold	S&P	Moody's
$ 20,000,000	A or above	A2 or above
$ 20,000,000	A- to A+	A3
$ 15,000,000	BBB+	Baa1
$ 10,000,000	BBB	Baa2
$ -	BBB- or lower	Baa3 or lower

Conectiv

Threshold	S&P	Moody's
Unspecified *	Above BBB+	Above Baa3
$ -	Below BBB-	Below Baa3

*** Conectiv does not have a defined credit threshold, so for planning purposes, a $10,000,000 threshold is imposed as a conservative limit**

Macquarie Cook Power

Threshold		S&P	Moody's
$	25,000,000	AAA	Aaa
$	20,000,000	AA- to AA+	Aa3 to Aa1
$	15,000,000	A- to A+	A3 to A1
$	10,000,000	BBB+	Baa1
$	5,000,000	BBB	Baa2
$	-	BBB- or below	Baa3 or below

FPL Energy

Threshold		S&P	Moody's
$	30,000,000	AAA	Aaa
$	25,000,000	AA- to AA+	Aa3 to Aa1
$	20,000,000	A- to A+	A3 to A1
$	15,000,000	BBB+	Baa1
$	10,000,000	BBB	Baa2
$	-	BBB- or below	Baa3 or below

Deutsche Bank

Threshold		S&P	Moody's
$	25,000,000	AAA	Aaa
$	20,000,000	AA- to AA+	Aa3 to Aa1
$	15,000,000	A- to A+	A3 to A1
$	10,000,000	BBB+	Baa1
$	5,000,000	BBB	Baa2
$	-	BBB- or below	Baa3 or below

Barclays Bank

Threshold		S&P	Moody's
$	25,000,000	AAA	Aaa
$	20,000,000	AA- to AA+	Aa3 to Aa1
$	15,000,000	A- to A+	A3 to A1
$	10,000,000	BBB+	Baa1
$	5,000,000	BBB	Baa2
$	-	BBB- or below	Baa3 or below

Credit Thresholds from the Counterparty Extended to Dover

Constellation Energy

Threshold	Fitch	Moody's
$ 40,000,000	AA- or Above	Aa3 or above
$ 30,000,000	A+	A1
$ 20,000,000	A	A2
$ 10,000,000	A-	A3
$ -	BBB or below	Baa1 or below

Integrys

Threshold	Fitch	Moody's
$ 20,000,000	AAA	Aaa
$ 20,000,000	AA- to AA+	Aa3 to Aa1
$ 15,000,000	A- to A+	A3 to A1
$ 10,000,000	BBB+	Baa1
$ 5,000,000	BBB	Baa2
$ 1,000,000	BBB-	Baa3
$ -	Below BBB-	Below Baa3

Sempra Energy

Threshold	Fitch	Moody's
$ 27,000,000	A- or above	A3 or above
$ 5,000,000	BBB+	Baa1
$ 1,000,000	BBB	Baa2
$ -	BBB- or lower	Baa3 or lower

Conectiv

Threshold	Fitch	Moody's
Unspecified *	Above BBB+	Above Baa3
$ -	Below BBB-	Below Baa3

***Conectiv does not have a defined credit threshold, so for planning purposes, a $10,000,000 threshold is imposed as a conservative limit**

Macquarie Cook Power

Threshold	Fitch	Moody's
$ 25,000,000	AAA	Aaa
$ 20,000,000	AA- to AA+	AA3 to Aa1
$ 15,000,000	A- to A+	A3 to A1
$ 10,000,000	BBB+	Baa1
$ 5,000,000	BBB	Baa2
$ -	BBB- or below	Baa3 or below

FPL Energy

Threshold	Fitch	Moody's
$ 23,000,000	AAA	Aaa
$ 18,000,000	AA- to AA+	AA3 to Aa1
$ 13,000,000	A- to A+	A3 to A1
$ 8,000,000	BBB+	Baa1
$ 3,000,000	BBB	Baa2
$ -	BBB- or below	Baa3 or below

Deutsche Bank

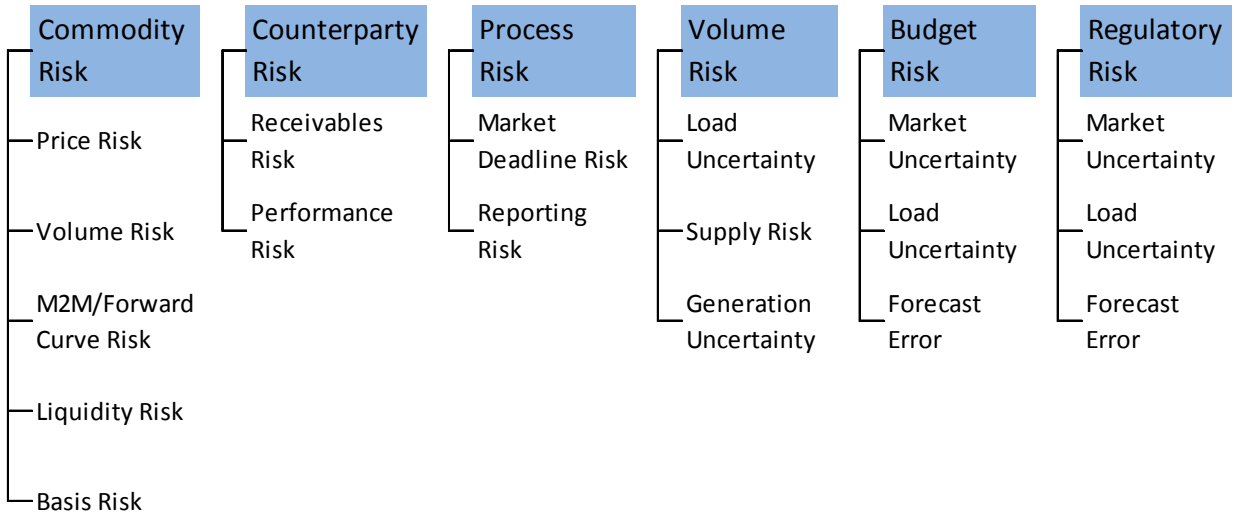
Threshold	Fitch	Moody's
$ 25,000,000	AAA	Aaa
$ 20,000,000	AA- to AA+	AA3 to Aa1
$ 15,000,000	A- to A+	A3 to A1
$ 10,000,000	BBB+	Baa1
$ 5,000,000	BBB	Baa2
$ -	BBB- or below	Baa3 or below

Barclays Bank

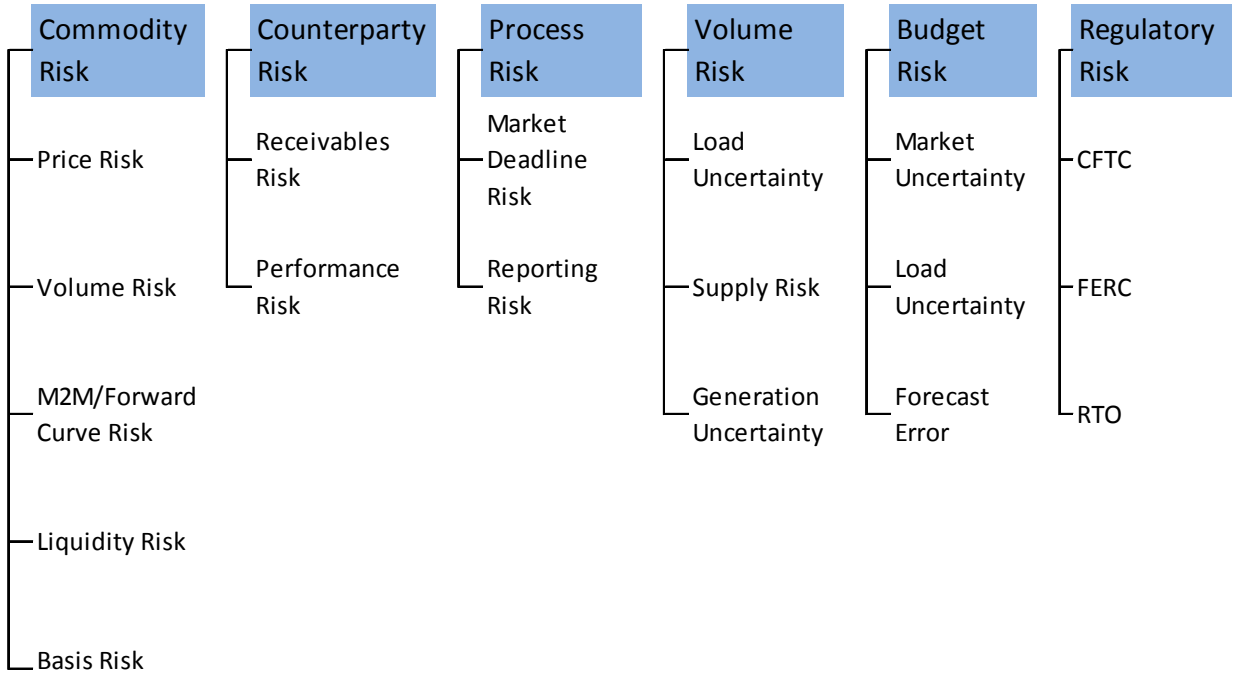
Threshold	Fitch	Moody's
$ 25,000,000	AAA	Aaa
$ 20,000,000	AA- to AA+	AA3 to Aa1
$ 15,000,000	A- to A+	A3 to A1
$ 10,000,000	BBB+	Baa1
$ 5,000,000	BBB	Baa2
$ -	BBB- or below	Baa3 or below

APPENDIX C – Business Risks

Business Risks Topology



Business Risks Topology



APPENDIX D – Glossary

Back Office – That part of a trading organization which handles transaction accounting, confirmations, management reporting, and working capital management.

Bilateral Transaction - Any physical or financial transaction between two counterparties, neither of whom is an Exchange or market entity (e.g. MISO).

Capacity – The real power output rating of a generator or system, typically in megawatts, measured on an instantaneous basis.

Commodity - A basic good used in commerce that is interchangeable with other commodities of the same type. Commodities are most often used as inputs in the production of other goods or services. The quality of a given commodity may differ slightly, but it is essentially uniform across producers. When they are traded on an exchange, commodities must also meet specified minimum standards, also known as a basis grade.

Financial Bilateral Transaction – A Bilateral Transaction that is non-physical and is defined by a Source Point, Sink Point, and Delivery Point that may be any CP Nodes as specified by the Midwest ISO.

Financial Forward – An agreement regarding a position in a specified commodity, a specified price, and a specified future settlement date, that does not result in physical delivery of the commodity. Rather one party in the agreement makes a payment to the other party on the basis of the commodity price at the future date.

Front Office – That part of a trading organization which solicits customer business, services existing customers, executes trades and ensures the physical delivery of commodities.

Hedging Transaction - A transaction designed to reduce the exposure of a specific outstanding position or portfolio; "fully hedged" equates to complete elimination of the targeted risk and "partially hedged" implies a risk reduction of less than 100%.

Mark-to-Market Value – A measure of the current value of unrealized positions; includes both Open Positions and Closed Positions.

Middle Office – That part of a trading organization that measures and reports on market risks, develops risk management policies and monitors compliance with those policies, manages contract administration and credit, and keeps management and the Board informed on risk management issues.

Policy – Dover's Governing Policy for Energy Commodity Risk, as amended and approved by The Utility Committee.

Portfolio – A collection of transactions.

Realized Gains/(Losses) – The amount earned (or lost) from a transaction , considered to be **realized** once the time for performance has lapsed (e.g. delivery of power in the case of physical transactions or expiration of an option in the case of financial transactions).

Term – The total duration of a contract, defined as the number of days between the beginning flow date and ending flow date, inclusive.

Unrealized Gains/ (Losses) – The amount expected to earn (lose) on a specific transaction(s); however, the time for performance has not lapsed. The total value of Unrealized Gains/ (Losses) is the Mark-to-Market value.

APPENDIX E – Swap Transaction Representative

Purpose:
To ensure that the City of Dover, a Special Entity under the Dodd-Frank Financial Reform Act, selects a qualified representative ("Representative") to provide advice and guidance when entering into swap transactions with Swap Dealers or Major Swap Participants.

Definitions:
Special Entity: As defined in 7 U.S.C. 6s(h)(2)(C) and further interpreted in 17 C.F.R. 23.401(c). The City of Dover is a Special Entity as defined by 17 C.F.R. 23.401(c)(2).

Swap Dealer: As defined in 7 U.S.C. 1a(49) and further interpreted in 17 C.F.R. 1.3(ggg)

Major Swap Participant: As defined in 7 U.S.C. 1a(33) and further interpreted in 17 C.F.R. 1.3(hhh)

Representative: As defined in this policy and 17 C.F.R. 23.450

Policy:
Selection: The City of Dover shall endeavor to seek and employ an individual or entity that will voluntarily act as a Representative for all energy commodity swap transactions between XXXX and any Swap Dealer or Major Swap Participant. The Representative must meet the following qualifications identified in 17 C.F.R. 23.450(b):

(i) Has sufficient knowledge to evaluate the transaction and risks;
(ii) Is not subject to a statutory disqualification;
(iii) Is independent of the swap dealer or major swap participant;
(iv) Undertakes a duty to act in the best interests of the Special Entity it represents;
(v) Makes appropriate and timely disclosures to the Special Entity;
(vi) Evaluates, consistent with any guidelines provided by the Special Entity, fair pricing and the appropriateness of the swap; and
(vii) In the case of a Special Entity as defined in § 23.401(c)(2) or (4), is subject to restrictions on certain political contributions imposed by the Commission, the Securities and Exchange Commission, or a self-regulatory organization subject to the jurisdiction of the Commission or the Securities and Exchange Commission; provided however, that this paragraph (b)(1)(vii) of this section shall not apply if the representative is an employee of the Special Entity.

The Representative and the City of Dover shall enter into a legal agreement that binds the Representative to comply with items (i) through (vii) in this policy.

At no longer than any 12 month interval, the City of Dover shall review the performance of the Representative to ensure compliance with items (i) through (vii) in this policy.

APPENDIX F – Authorized Individuals

As described in RISK LIMITS AND RISK MEASUREMENTS, the ERMC may delegate approval authority. Dover has delegated to TEA execution authority and with the delegations below, if there is a trade within the limit structure, TEA may execute without ERMC approval:

Position	Maturity Limit	Term Limit	Notional Value Limit
TEA Trader	30 days	30 days	1,000,000