



Commission Policy

Subject: Energy Risk Management Policy	Index: 1-59.06
Authority Statute:	Page: 1 of 6
Resolution: 11-118-9; <u>16-151-11</u>	Date Issued: 9/26/11
	Date Revised: <u>11/28/16</u>

I. INTRODUCTION AND SCOPE

This energy risk management policy (hereafter referred to as “Policy”) addresses the methods, procedures and practices that are to be exercised to ensure effective and judicious price-risk management associated with the Milwaukee Metropolitan Sewerage District’s (District) procurement of the natural gas commodity. The Policy does not apply to the selection of a natural gas provider and a natural gas transporter, which are covered under Commission procurement policies 1-78.01 and 3-78.01.

The District, in the normal course of business consumes natural gas in its operations, and is therefore subject to inherent market price risk. In order to minimize price risk, one key element of an energy risk management policy is to address hedging strategies. In a natural gas hedge, the District is obligated to take delivery of the natural gas commodity, on a specified future date and at a predetermined price. Payment in full is due at the time of delivery. Therefore, the Policy must define acceptable hedging strategies as well as when hedges are not acceptable.

II. ENERGY RISK MANAGEMENT OBJECTIVES

The District's principal energy risk management objectives are:

- Enhanced price stability in order to increase user charge rate stability.
- Minimize or eliminate unfavorable budget variances.
- Mitigate risk and uncertainty.
- Conformance with all State of Wisconsin statutes, Commission Policies, Administrative Policies, and Administrative Procedures.



Commission Policy

Subject: Energy Risk Management Policy

Index: 1-59.06

Authority Statute:

Page: 2 of 6

Date Issued: 9/26/11

Resolution: 11-118-9; 16-151-11

Date Revised: 11/28/16

III. DELEGATION OF AUTHORITY

An Energy Committee shall be created comprised of the following members:

Voting Members

- District-Contract Compliance Manager (Chairperson)
- District-~~Controller~~Director of Finance/Treasurer
- District-~~Budget Manager~~Deputy Director of Finance
- Three representatives of Veolia Water Milwaukee (VWM)

Non-voting members:

- Energy advisor
- Natural gas provider

In all voting transactions, District votes will count towards 75% of the vote total and VWM will have 25% of the vote total.

Meetings will be held on a monthly basis to discuss natural gas quantity needs based on current and future operations of the water reclamation facilities along with buying opportunities based on current and forecasted market conditions. Other unscheduled meetings may be called based on material market or operational changes as well as for general unforeseen circumstances at the discretion of the Chairperson. All meetings will be attended by a quorum, defined by at least one District voting member and one voting member from VWM, either in person, by proxy, or telephonically.

All Committee recommendations for the purchase of natural gas hedged commodity shall be submitted to the District's Executive Director for approval prior to submittal to the natural gas provider.



Commission Policy

Subject: Energy Risk Management Policy	Index: 1-59.06
Authority Statute:	Page: 3 of 6
Resolution: 11-118-9; <u>16-151-11</u>	Date Issued: 9/26/11
	Date Revised: <u>11/28/16</u>

IV. FORECASTED DEMAND REQUIREMENTS

Natural gas consumption depends on a number of variables including operational strategies, water reclamation facility influent loads, construction projects, weather (rainfall and temperature) and the supply of landfill gas. Estimated natural gas requirements, in dekatherms, will be established as part of the annual Operations and Maintenance budget development. Once the demand forecast is established, it will be reviewed and updated at the monthly meeting of the Energy Committee. Demand forecasts beyond the budgeted fiscal year will rely on latest forecast estimates approved by the Energy Committee.

V. HEDGING REQUIREMENTS, RESTRICTIONS AND STRATEGY OUTLINE

In order to minimize price risk, District staff will be allowed to enter into natural gas hedges.

In a natural gas hedge, formally called a forward contract, the District enters a bilateral supply agreement, whereby the District is obligated to take delivery and the seller is obligated to provide delivery of a fixed amount of a commodity at a predetermined price on a specified future date. Payment in full is due at the time of delivery. The District is subject to the counterparty risk of the supplier.

For any hedge strategy, the amount hedged for any month must not violate the respective hedge limits defined in the table below.



Commission Policy

Subject: Energy Risk Management Policy

Index: 1-59.06

Authority Statute:

Page: 4 of 6

Date Issued: 9/26/11

Resolution: 11-118-9; 16-151-11

Date Revised: 11/28/16

Approved Hedge Limits per Month	
	Natural Gas
Approved Budget Fiscal Year	
Minimum	0
Maximum	80%
1st Fiscal Year Beyond Approved Budget Year	
Minimum	0
Maximum	60%
2 nd Fiscal Year Beyond Approved Budget Year*	
Minimum	0
Maximum	40%
3 rd Fiscal Year Beyond Approved Budget Year	
Minimum	0
Maximum	20%

Any proposed hedge position outside of the limits listed above must receive prior approval by the Commission.

All hedges for natural gas will be executed through the District's natural gas provider.



Commission Policy

Subject: Energy Risk Management Policy

Index: 1-59.06

Authority Statute:

Page: 5 of 6

Date Issued: 9/26/11

Resolution: 11-118-9; 16-151-11

Date Revised: 11/28/16

Strategic Objectives

The strategic intent of the natural gas risk management strategy has 4 components that will facilitate the delivery of the District's financial objectives;

- 1) Mitigate cash flow volatility through disciplined market risk tools.
 - a. Leverage expertise in evaluating key fundamental and technical indicators impacting the commodity markets. Detailed econometric analysis of fundamental relationships that have had statistically significant relationships with Henry Hub futures pricing will be utilized to determine the breakeven cost of production and the fundamental fair value of the commodity.
 - b. Depending on current market conditions, a strategy may include forward limit orders to capitalize on favorable economic conditions, stop limit orders designed to protect budgets, and options designed to limit forecasting inaccuracies. These risk management strategies are proactive to avoid the many pitfalls of emotional, reactionary commodity trades and may utilize a combination of the above tools to deliver financial objectives and protect cash flows.
- 2) Reduce budget variance through an extended hedging horizon and a disciplined, robust budget setting process.
 - a. Budget variances will be mitigated through the adoption of an extended horizon allowing the District to begin the budgeting process with varying degrees of price certainty.
 - b. Augment budget process through the utilization of disparate underlying sources that will reduce forecasting bias. All budgets will utilize price forecasts for the respective periods from the Energy Information Administration (EIA), NYMEX forward curve at the respective budget date, and at least 5 forecasts from leading private institutions.
- 3) Provide competitive end user rates.



Commission Policy

Subject: Energy Risk Management Policy

Index: 1-59.06

Authority Statute:

Page: 6 of 6

Date Issued: 9/26/11

Resolution: 11-118-9; 16-151-11

Date Revised: 11/28/16

- a. Benchmark natural gas rates with other regional companies with similar risk profiles, e.g., ~~WeE~~ Energies, to determine the competitiveness of the District's Risk Management performance. District should expect to perform reasonably comparable to other agencies exposed to significant natural gas price risk.

4) Deliver risk management strategies commensurate with the latest demand forecast.

- a. Avoid costly forecasting errors with a direct feedback from Operations in the monthly Energy Committee. See section IV.

VI. REPORTING REQUIREMENTS

Compliance with this policy shall be measured by the quarterly hedge report prepared for the Commission. This report shall summarize the outstanding hedges, hedge ratios, hedge effectiveness test results, and the mark-to-market value.

VII. POLICY REVISIONS

This Policy shall be reviewed periodically (at least once annually) by the Energy Committee and may be amended by the Commission as conditions warrant.