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Case No. EO-2017-0065

Date Testimony Prepared: June 2017

#### **Before the Public Service Commission**

of the State of Missouri

Rebuttal Testimony

of

Robert Sager

June 2017



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# REBUTTAL TESTIMONY OF ROBERT SAGER THE EMPIRE DISTRICT ELECTRIC COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION CASE NO. EO-2017-0065

#### 1 <u>INTRODUCTION</u>

2	Q.	PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.			
3	A.	My name is Rob Sager. I am the Vice President of Finance and Administration for			
4		The Empire District Electric Company ("Empire"). My business address is 602			
5		South Joplin Avenue, Joplin, Missouri.			
6	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.			
7	A.	I am a licensed Certified Public Accountant and hold a Bachelor of Science Degree in			
8		Accounting from Pittsburg State University, Pittsburg, Kansas. I have been employed			
9		by Empire since October of 2006. Prior to assuming my current position, I was the			
10		Controller, Principal Accounting Officer, Assistant Treasurer, and Assistant			
11		Secretary. Prior to joining Empire, I worked for a regional public accounting firm for			
12		approximately ten years. While practicing public accounting, I was a senior manager			
13		providing auditing and consulting services to various clients including corporations			
14		that filed with the Securities & Exchange Commission ("SEC").			
15	Q.	HAVE YOU PREVIOUSLY PRESENTED TESTIMONY BEFORE THE			
16		MISSOURI PUBLIC SERVICE COMMISSION ("COMMISSION")?			
17	A.	Yes. I have presented testimony in several Empire rate cases.			
18	Q.	WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS			
19		CASE?			

1	A.	My Rebuttal Testimony responds to the Direct Testimonies of the Office of the Public			
2		Counsel ("OPC") witnesses John Riley and Charles Hyneman by explaining the			
3		structure of Empire's Risk Management Oversight Committee ("RMOC") and			
4		providing the history, context, and strengths of Empire's Risk Management Policy			
5		("RMP") provided in Appendix RS-1.			
6	Q.	WHAT OTHER REBUTTAL TESTIMONIES WILL BE PROVIDED BY			
7		EMPIRE?			
8	A.	Empire witness Aaron Doll will address discrepancies in OPC direct testimonies			
9		related to the implementation of Empire's hedging practices, and Blake Mertens will			
10		discuss the hedge performance evaluation.			
11	Q.	DO THE DIRECT TESTIMONIES OF OPC WITNESSES RILEY AND			
12		HYNEMAN ACCURATELY PORTRAY EMPIRE'S RMOC AND RMP?			
13	A.	No.			
14	Q.	WHAT IS THE RMOC?			
15	A.	The RMOC is the committee formed of Empire's management team that are central			
16		in the oversight of risk activities of Empire's fuel and power procurement efforts.			
17	Q.	ARE YOU A MEMBER OF RMOC?			
18	A.	Yes. I have been a member since 2011 and currently preside as chair of the			
19		committee. Attached to this testimony is the current RMP which includes the			
20		composition of the RMOC on pages 5-6.			
21	Q.	WHAT ARE THE RESPONSIBILITIES OF THE RMOC?			
22	A.	As defined in the RMP, the RMOC is charged with monitoring aggregate risks and			
23		ensuring they are managed in accordance with the RMP. Additionally, the RMOC is			

to meet periodically to assess aggregate risks and review Empire's market positions,

24

1		exposures, and strategy. To meet these obligations, RMOC approves hedging			
2		strategies, approves authorized individuals to perform trading activities, sets			
3		transaction exposure limits, ensures credit approval and documentation, establishes			
4		procedures and reporting systems, and establishes approved counterparty lists.			
5	Q.	HOW OFTEN DOES RMOC MEET?			
6	A.	The RMOC typically meets quarterly and more often if conditions warrant.			
7	Q.	WHAT ARE THE GOALS OF THE ELECTRIC HEDGING STRATEGY AS			
8		SET FORTH BY THE RMOC AND THE RMP?			
9	A.	The RMP defines the goals of Empire's hedging strategy as the provision of			
10		predictable fuel and purchased power costs over a multi-year period and the			
11		framework to allow for management of its risk positions. The framework includes a			
12		comprehensive set of tools to mitigate the adverse impacts associated with changing			
13		natural gas or wholesale electricity prices. In effect, the strategies set out to determine			
14		the reasonable amount of market risk to balance costs and volatility while still			
15		providing the electric customers with reasonable fuel costs.			
16	Q.	HOW OFTEN IS THE RMP REVIEWED?			
17	A.	It is continuously reviewed. Since the beginning of the audit period, the RMP has			
18		been revised three separate times and is currently undergoing another round of			
19		proposed revisions.			
20	Q.	MR. HYNEMAN CLAIMS IN HIS TESTIMONY THAT EMPIRE DID NOT			
21		FOLLOW THROUGH WITH ITS COMMITMENT TO "MODIFY EMPIRE'S			
22		HEDGING ACTIVITIES IN RESPONSE TO CHANGES IN THE NATURAL			

GAS MARKET." IS THIS TRUE?

23

A.	No. The 2004 testimony of Empire witness Brad Beecher, as cited by Mr. Hyneman,
	mentions specifically that "revisions would be made approximately annually to
	reflect lessons learned and changes in markets and financial instruments." The RMP
	at its inception extended beyond natural gas exposure by seeking to also mitigate
	power price exposure, coal price exposure, emission exposure, counterparty exposure,
	and credit risk exposure. At the time of Mr. Beecher's testimony (April, 2004), the
	RMP was in its third year of existence, was approximately 19 pages long, and was
	still undergoing developments to better manage Empire's risk positions. It is clear
	that the individuals approving the first draft of the RMP in 2001 were self-aware that
	the nascent document would need to be reviewed systematically to bolster the
	document with the lessons learned since its initial deployment.

- 12 Q. PLEASE CONTINUE WITH YOUR DESCRIPTION OF THE CHANGES TO
  13 THE RMP AND THE MODIFICATION OF EMPIRE'S HEDGING
  14 ACTIVITIES IN RESPONSE TO CHANGES IN THE NATURAL GAS
  15 MARKET.
- By 2007, the RMP had matured to 36 pages in length and provided significantly more A. depth regarding risk assessment, responsibilities, internal controls, reporting requirements, etc. One of the developments in the RMP 2007 version was Chapter 7, which specifies that "(o)n a periodic basis, the RMOC will review and mutually make a recommendation to the Officer Group on the adequacy of the RMP and any necessary changes." After six years of existence, the RMOC shifted its focus from systematic review of the RMP to periodic review of the RMP and redefined its charge as "monitoring the aggregate risks and ensuring they are managed in accordance with the RMP." The natural evolution of the RMOC to begin with risk document

ı		development and graduate to aggregate risk review and review of exposure and			
2		strategies is not the same as abdicating a commitment. Mr. Hyneman's			
3		misunderstanding of the breadth of the RMP at the time of Mr. Beecher's testimony			
4		has led Mr. Hyneman to falsely accuse Empire of not following through with its			
5		commitment to ensure the RMP is still applicable and effective. Currently, the RMP			
6		is 39 pages and has continued to evolve as Empire has faced new risks, most			
7		prominent of which is the commencement of the Southwest Power Pool ("SPP")			
8		Integrated Marketplace ("IM") and the transmission congestion market which			
9		necessitated a significant editing process and review by members of the RMOC.			
10	Q.	BOTH MR. RILEY AND MR. HYNEMAN ALLEGE THAT EMPIRE'S			
11		HEDGING POLICY IS TOO RIGID AND INFLEXIBLE. IS THIS TRUE?			
12	A.	No. On the contrary, one of the strengths of Empire's hedging policy is that it allows			
13		for flexibility within the strategy based on market conditions without requiring			
14		constant revisions to the policy.			
15	Q.	PLEASE EXPLAIN.			
16	A.	Our hedging policy provides a systematic manner in which volumes are to be hedged,			
17		referred to in the policy as progressive dollar-cost averaging. The current policy is			
18		structured as such:			
19		-Hedge a minimum of 10% of year four expected gas burn			
20		-Hedge a minimum of 20% of year three expected gas burn			
21		-Hedge a minimum of 40% of year two expected gas burn			
22		-Hedge a minimum of 60% of year one expected gas burn			
23		Furthermore, current year hedging may reach up to 100% and any future year may			
24		reach up to 80% while remaining cognizant of volume risk. The strength of this			

1		structure is that it allows for strategic decisions to affect the amount of volume				
2		hedged up to a point, while still requiring some minimum level of hedging to occur.				
3	Q.	WHAT EVIDENCE DOES OPC PROVIDE TO DEMOSTRATE THE				
4		ALLEGED RIGIDITY AND INFLEXIBILITY OF EMPIRE'S NATURAL				
5		GAS FUEL HEDGING STRATEGY?				
6	A.	I find no evidence provided in OPC's Direct Testimony. Fourteen references are				
7		made between the Direct Testimonies of OPC witnesses Riley and Hyneman alleging				
8		Empire's natural gas hedging policy and/or RMP is too rigid or inflexible. However,				
9		each reference to Empire's "rigid" or "inflexible" natural gas hedging policy is				
10		simply just the statement that the policy is too rigid or inflexible. At one point, Mr.				
11		Riley attempts to demonstrate the rigidity and inflexibility of the policy by simply				
12		quoting the policy and suggesting that since the policy has not changed over the past				
13		16 years it is by definition rigid and inflexible. By this logic, Empire could have had				
14		a policy that allowed for 0% hedging to 100% hedging any number of years out and				
15		he would have still found the policy to be rigid and inflexible, so long as it did not				
16		change. Not once does Mr. Riley or Mr. Hyneman provide any sort of evidence as to				
17		what a flexible and non-rigid policy entails. In fact, Mr. Hyneman asserts that the				
18		only prudent action in the current natural gas environment is to abandon hedging.				
19	Q.	IS IT TRUE THAT EMPIRE'S POLICY CONCERNING NATURAL GAS				
20		PURCHASES HAS NOT CHANGED IN 16 YEARS?				
21	A.	No. The concept of progressive dollar-cost averaging has stayed the same, but in the				
22		2001 RMP Empire had different sets of requirements of hedges to obtain based on				
23		rates approved by the Commission, and even those limits varied from what is in the				
24		policy today. Below is an excerpt from the 2001 RMP regarding natural gas hedging:				

1 2 3 4 5 6 7 8		If EDE can procure the rights to purchase natural gas through the approved instruments in the policy at rates equal to or below those included in the fuel costs approved by the Missouri Public Service Commission, EDE will utilize the following guidelines. (Year 1 is the next calendar year.)  A. Procure 20% of year four gas for regional market needs B. Procure 40% of year three gas for regional market needs C. Procure 60% of year two gas for regional market needs D. Procure 80% of year one gas for regional market needs.
9 10 11 12 13 14 15 16	Q.	If EDE cannot procure the rights to purchase natural gas at rates equal to or below those included in the fuel costs approved by the Missouri Public Service Commission, EDE will utilize the following guidelines:  E. Procure 0% - 20% of year four gas for regional market needs F. Procure 20% - 40% of year three gas for regional market needs G. Procure 40% - 60% of year two gas for regional market needs H. Procure 60% - 80% of year one gas for regional market needs.
18	Q.	COMPANY LIKE EMPIRE IS HEDGING GREATER THAN 60% OF ITS
19		GAS NEEDS, THEN ITS HEDGING PROGRAM IS A BUDGETING
20		FORECASTER NOT A PRICE SPIKE MITIGATOR?
21	A.	I am not certain what Mr. Riley means by a budget forecaster other than that hedging
22		is locking in a certain amount of gas, presumably at a fixed cost if it is not procured at
23		index, and the intent is to provide price certainty. However, a fixed cost hedge would
24		indeed serve as a price spike mitigator. If Empire were looking to hedge solely as a
25		budget forecaster then it would likely hedge 100% of its gas needs in advance of the
26		operation year. Rather, Empire has been hedging toward the bottom of the
27		aforementioned bands which still leaves approximately 40% subject to spot natural
28		gas prices.
29	Q.	DO YOU BELIEVE IT IS PRUDENT TO ABANDON EMPIRE'S NATURAL
30		GAS HEDGING ACTIVITIES AT THIS POINT, AS ASSERTED BY OPC?

1	A.	No. Empire's opinion is aligned with the Public Utilities Fortnightly article cited by			
2		Mr. Hyneman in his Direct Testimony. The article is attached to the Direct Testimony			
3		of Empire witness Mertens as Appendix BAM-1 and states on page 5 as follows			
4		(emphasis added):			
5 6 7 8 9 10 11 12 13		It is somewhat ironic that in today's market, as the price of hedging has declined, stakeholder support for hedging has waned. The low-price and low market-volatility environment introduces opportunities to execute hedges at historically attractive price levels. If utilities were to abstain from hedging until volatility increased and market prices rose, the cost of hedging would increase to the point where hedging could be deemed by regulators to be too costly for ratepayers.  When reading the article cited by Mr. Hyneman in its entirety, it provides substantial			
15		support for continued use of a hedging program in today's natural gas market.			
16	Q.	DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?			
17	Α.	Yes it does.			

#### AFFIDAVIT OF ROBERT W. SAGER

) ss
COUNTY OF JASPER )
On the <u>21st</u> day of June, 2017, before me appeared Robert W. Sager, to me personally known, who, being by me first duly sworn, states that he is the VP or Finance and Admininistration of The Empire District Electric Company and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.
Robert W. Sager
Subscribed and sworn to before me this <u>21st</u> day of June, 2017.
<u>Shewig. Blawck</u> Notary Public
My commission expires: \( \frac{100.16}{2018} \). SHERRI J. BLALOCK  Notary Public - Notary Seal  State of Missouri, Newton Counity  Commission # 14969626  My Commission Expires Nov 16, 2018

## THE EMPIRE DISTRICT ELECTRIC COMPANY ENERGY RISK MANAGEMENT POLICY

February 1<sup>st</sup>, 2017



### THE EMPIRE DISTRICT ELECTRIC COMPANY ENERGY RISK MANAGEMENT POLICY

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#### 1 STANDARDS OF OVERALL COMPANY PROGRAM

#### INTRODUCTION

The purpose of the Energy Risk Management Policy (RMP) document is to define the approach and internal rules that The Empire District Electric Company (Company) will utilize to manage its power and natural gas commodity risk. The content of this document establishes and describes the Company policy in assuming, assessing, and controlling the level of natural gas commodity and power price risk exposure involved in the Company's core business activities.

#### **OBJECTIVES**

It is the policy of the Company NOT to engage in financial or commodity transactions unless they are related to the procurement of natural gas or power for end-use customers or minimizing the overall cost for end-use customers. It is the express intention of the Company to prohibit financial or physical commodity transactions that would reasonably be considered outside of the Company's core business activities.

The following are specific RMP objectives for the Company that represents a balanced financial and operational focus:

#### **OBJECTIVE #1**

Provide an organizational structure to support management goals and budget performance by mitigating energy price volatility and; hence, limiting fluctuations in the cost of supplying energy to retail customers.

The RMP provides an organizational structure for effectively assessing and managing risk associated with the Company's natural gas supply for fuel, commodity sales and wholesale power activities. It provides a framework for effective control, audit, and reporting. The procedures set forth allow for the management of operational risks without placing undue restrictions on the operations of the Company.

#### **OBJECTIVE #2**

Allow utilization of physical and financial tools to provide a predictably priced reasonable cost gas-supply.

For the electric segment the cost to generate, purchase, and sell power is greatly impacted by fluctuations in the market price of energy sources such as coal, natural gas, oil, and wholesale electricity. This RMP outlines procedures on how hedge positions will be employed to limit these market fluctuations in the price of natural gas and provide the Company with tools to manage expenses to generate, purchase, and sell power on behalf of its customer base.

For the gas segment, the cost of natural gas supplies is greatly impacted by fluctuations in the market price of natural gas. This RMP outlines procedures on how hedge positions will be employed to limit these market fluctuations and provide the Company with tools to manage price volatility with regards to the purchase and supply of natural gas for its customer base.

#### **OBJECTIVE #3**

Allow utilization of physical and financial tools to provide a predictably priced reasonable cost power-supply.

For the electric segment the cost to provide power is impacted by fluctuations in transmission congestion due to limitations on the physical grid. This RMP outlines procedures on how the company will utilize financial rights that are awarded based on investment in the transmission system to limit exposure and provide value to the customer base.

#### 2. RESPONSIBILITY FOR ENERGY RISK MANAGEMENT POLICY

The Officer Group as listed below is responsible for maintaining and overseeing the RMP:

The Officer Group is comprised as follows:

President

Vice President - Finance

Vice President - Gas Operations

Vice President - Electric Operations

From time to time, the Officer Group will report to the Board of Directors on the risk management activities surrounding natural gas and power risk. Officer Group activities shall include:

- Providing the Risk Management Oversight Committee (RMOC) authorization to engage in those activities consistent with prudent risk management and related trading practices which correlate with serving customers energy needs for both the electric and gas segments;
- Recognizing financial instruments such as futures, swaps, options, Auction Revenue Rights, Transmission Revenue Rights, and Financial Transmission Rights as well as financial and physical market position management, can be effective transaction tools; and
- Providing sufficient management involvement, financial controls, and systems to monitor, report, and ensure the integrity of the RMP at all levels.

#### RISK MANAGEMENT OVERSIGHT COMMITTEE

The RMOC is charged with monitoring aggregate risks and ensuring they are managed in accordance with the RMP. The RMOC will meet periodically to assess aggregate risks and review EDE's market positions and exposures and strategy.

The RMOC is comprised as follows:

Chairman

Vice President - Finance

Members:

Vice President - Gas Operations

Vice President - Electric Operations

**Director of Supply Management** 

Director of Accounting and Administration

Non-Voting Internal Control Members:

President (see exceptions at Appendix 12)

Director of Regulatory & Planning / Assistant Director of Regulatory & Planning

Director of Internal Audit

Manager of Fuel & Revenue Accounting

Manager of Gas Supply

Manager of Market Operations

Manager of Market Settlements & Systems

Fuel Contracts Manager Supply Management Specialists (Specialists) Planning Analyst – Supply Management

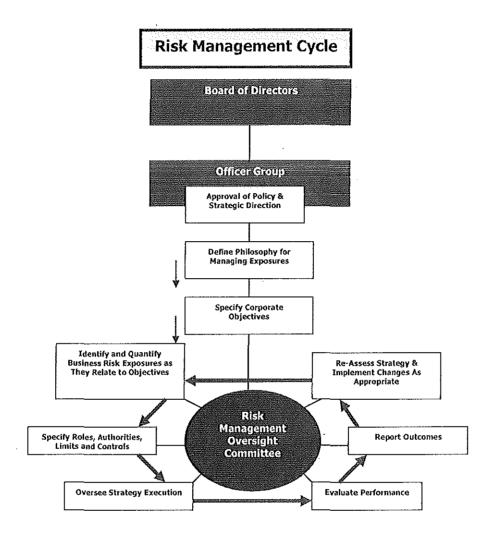
#### RMOC RESPONSIBILITIES

- <u>Approve Hedging Strategies</u> Develop and approve strategies that achieve risk management objectives.
- Individual Trading Authorization Approve a list of individuals authorized to establish trading relationships and execute trades. The hierarchy of oversight will include opening futures accounts, executing International Swap Dealer Association (ISDA) master agreements, placing futures orders, and entering into transactions per a master swap agreement. (See Appendix 12: Supply Management Specialist Authorization.)
- <u>Approve LTCR/ARR/TCR/FTR Procurement Strategies</u> Approve strategies that mitigate transmission congestion exposure and provide value to the customer base.
- <u>Set Transaction Exposure Limits</u> Approve limits on volumes and length of coverage of all outstanding physical, financial, virtual, futures, options, and Over-the-Counter (OTC) positions.
- Ensure Credit Approval and Documentation The credit approval/ monitoring process is described in Appendix 1: Credit Risk / Procedures Policy.
- Establish Procedures and Develop Reporting Systems Ascertain appropriate checks and balances are in place and financial reporting is correct.
- <u>Establish Approved Counterparty List</u> Establish an approved counterparty trading list.

Any member of the RMOC has authority to call committee meetings and the responsibility to ensure that all activities are in accordance with this program. The committee may meet in person, through telephone conference calls, and/or electronic mail. The RMOC secretary (who is not a member of the RMOC) will keep regular minutes and records of meetings and actions.

At any time a RMOC member believes the committee has failed to adequately address a situation in which the member believes price or credit speculation is taking place, that member shall submit a written statement describing the concern to the President and CEO or the Director of Internal Audit.

#### **RMOC CYCLE**



#### 3 RISK

#### COMPANY/CUSTOMER EXPOSURE

Effective September 1, 2008, the electric segment was granted a fuel adjustment clause (FAC) for its Missouri customers. The FAC allows the electric segment to recover/refund 95% of prudent fuel and purchased power costs versus a base rate established in rate case ER-2008-0093 and any future rate cases. The Company/Customer's exposure spans activity in both the physical fuels market and the financial derivative markets that have developed to accommodate natural gas and power. Without risk management, the Company will be subject to cost and pricing uncertainty, as well as uncertainty in meeting budgeted earnings and cash flow.

The primary components of the Company'/Customer's risk exposure are operations risk, market risk, and credit risk. The RMP is designed to address the management of these risks in the aggregate.

Individual transactions for the electric segment and for the gas segment shall be transacted for the benefit of each party.

#### **OPERATIONS RISK**

The potential increased cost for items such as: changes in load or generation capabilities, providing replacement power and natural gas due to the unscheduled outage of generation plants, interruptions of power purchases from other parties, or interruption of gas supply.

#### MARKET RISK

The potential change in value of a commodity contract, liability, or cash flow caused by adverse fluctuations in market factors over a pre-defined holding period. Types of market risk include:

- <u>Price Risk</u> Uncertainty associated with changes in the price level of power costs and commodity fuel costs.
- <u>Liquidity Risk</u> Risk associated with the diminished market activity of a fuel commodity or transmission congestion instrument.
- Volume Risk Supply or demand deviation from forecast (for example, the risk of not having enough or having too much natural gas to meet forecasted obligations).
   Volume risk is highly correlated with price risk because availability of wholesale electricity and natural gas is high and priced low when the weather is mild causing reduced volume need. Conversely, when weather is extreme causing an increase in our underlying needs, the price of wholesale electricity and natural gas may increase exponentially.
- <u>Calendar Risk</u> Exposure due to time differential in commodity value between actual physical delivery and financial position expiration.
- <u>Basis Risk</u> Exposure due to a difference in commodity value between different delivery points or markets, between cash market prices and the pricing points used in the financial markets, or the difference in the marginal congestion component between different settlement locations.

#### COUNTERPARTIES/CREDIT RISK

Managing credit/counterparty risk exposure is an important component in EDE's overall risk management program. The Company/Customer's exposure is different when transacting in clearinghouses, marketplaces, or OTC counterparts.

The creditworthiness of trading partners or clearinghouses is a function of both qualitative and quantitative factors. Such factors are centered on the credit rating assigned to a company by major credit rating services and an evaluation of the company's ability to financially meet its obligations to the Company. Typical sources of credit-related information are credit rating reports (published by one or more of the

commonly recognized rating agencies, such as Dunn & Bradstreet, Standard & Poor's, or Moody's), general market intelligence, electronic news releases, and other public information sources. Based on these resources, the RMOC will provide oversight as to each approved counterparty's credit exposure limit.

Credit risk associated with maintaining an account with a futures clearinghouse is considerably less than that with OTC counterparts. This distinction exists because the collective clearinghouse members of NYMEX, which includes virtually every major energy company and financial institution in the country, guarantee the performance on all positions placed on the exchange. Requiring margin deposits and daily mark-to-market by clearinghouse members allows for incremental monitoring and control of transactions and eliminates the potential for sudden defaults on contracts.

Credit risk associated with SPP Market Participant (MP) default is considerably less than that with OTC counterparts. This distinction exists because the collective members of SPP share in the costs of the default by any one member. Furthermore, SPP performs a daily calculation of a Total Potential Exposure and a total TCR credit requirement for each market participant, allowing for incremental monitoring and control of transactions and eliminates the potential for sudden defaults on contracts by market participants. Additionally, SPP's TCR credit requirement is secured through a cash deposit or Irrevocable Letter of Credit<sup>1</sup>. This financial security is maintained for TCR activity and is not included in the Total Potential Exposure determination, but is reflected in the determination of whether there is a Total Potential Exposure violation.

#### ESTABLISHING CREDIT RESPONSIBILITIES

As defined in Appendix 1 - Credit Risk / Procedures Policy, establishing limits and creditworthiness monitoring will be done independent of the trading function and will be performed by the Manager of Fuel Accounting (MAF) in Finance (with oversight by the RMOC), in order to guarantee appropriate segregation of duties within the Company. All trading activity with a particular counterparty who no longer meets the Company's credit standards will be halted. A Counterparty Credit Exposure Report will be included as part of the monthly Gas Position Report described later. The report will summarize the total amount of exposure by counterparty by hedging instrument based on current mark-to-market amounts.

#### 4. HEDGE STRATEGY

#### **Electric Segment**

Prior to September 1, 2008, the electric segment's Missouri retail rates were not subject to a fuel cost adjustment clause. Effective September 1, 2008 regulators granted a fuel adjustment clause (FAC) for recovery/refund of 95% of prudent fuel expenses versus a base rate established in rate case ER-2008-0093 and any future rate cases.

<sup>&</sup>lt;sup>1</sup> Appendix X Article 7; SPP Credit Policy

The Missouri FAC allows Empire to recover 95% of under-recovered prudent fuel expenses and return to customers 95% of any over-recovered prudent fuel expenses versus a base rate. Costs eligible for the FAC will be the total fuel costs as allocated to Missouri for fuel consumed in generating units, including the costs associated with fuel hedging programs; purchased power costs excluding demand costs; and the net of ARR/TCR/FTR activity as well as emission allowance costs and revenue. These costs will be off-set by sales activity in the SPP Integrated Marketplace.

Actual costs will be accumulated during the 6 month Accumulation Period, These costs will be used to determine the Cost Adjustment Factor (CAF) that will be filed with the Missouri Public Service Commission and upon their approval will be applied to retail customer billings during the appropriate Recovery Period.

The electric segment's strategic focus addresses the volatility of natural gas prices by attempting to protect against volatile natural gas costs for the electric segment's plants. The electric segment will apply risk management strategies in an attempt to lessen the risks associated with variances in the volume of fuel consumed relative to budgeted fuel consumption volume.

The electric segment's specific hedge strategy goals are to provide for predictable fuel and purchased power costs over a multi-year period and to provide a framework to allow for management of its risk positions.

The RMP is designed to provide the Supply Management Group (SMG) with a more comprehensive set of tools to mitigate the adverse impacts associated with changing natural gas or wholesale electricity prices.

Risk management strategies involve an active "mark-to-market" assessment of market conditions to match its supply portfolio to its portfolio of retail and wholesale activity.

In effect, these strategies set out to determine how much market risk is reasonable to best minimize costs and volatility, while still providing the electric segment with reasonable fuel costs.

An overview of the electric segment's hedging targets for natural gas is outlined below.

At least yearly, the electric segment will model its electric system with a production cost model to establish an expected gas burn for each of the next four years. This budgeted gas burn will be developed utilizing a consistent methodology as that utilized in the Company's financial projections.

From time to time as conditions change (i.e. unit outages, gas commitments, purchase power prices), the SMG shall assess the electric segment's system to establish a new "expected" gas burn for market participation.

For the electric segment's purposes hedging includes physical forward purchases, physical management tools such as pipeline imbalance tariffs, park and loan, interruptible storage, OTC swaps and exchange traded financial contracts.

Firm storage, due to inherent injection and withdrawal restrictions and requirements to reduce inventory levels during certain periods of the year, will be considered as operational (daily balancing and reliability tool for the electric segment) and not part of the hedging plan.

The electric segment will utilize the following procurement guidelines:

- Hedge a minimum of 10% of year four expected gas burn
- Hedge a minimum of 20% of year three expected gas burn
- Hedge a minimum of 40% of year two expected gas burn
- Hedge a minimum of 60% of year one expected gas burn

The SMG will have the flexibility to hedge up to 100% of the current year and 80% of any future year's expected requirements while remaining cognizant of volume risk. The 80% guideline is an annual target and volumes up to 100% can be hedged in any given month. For years beyond year four, additional factors of long term uncertainty in required volumes, counterparty credit, etc. should also be considered.

(By December 31 of current year we should have a minimum of 60% of the next years projected gas burn hedged.)

This progressive dollar cost averaging approach is intended to protect our customers and shareholders from volatility in the marketplace. In addition, the progressive approach allows for increasing uncertainty of gas needs inherent in forecasting events occurring further in the future.

If changes in expected gas burns occur that make us more than 100% hedged in any given month, appropriate steps will be taken following consideration of accounting guidance and review by the RMOC. Given that there is some uncertainty in our modeling efforts, an over-hedged position of 50,000 MMBtu's or less would generally not be considered material and not subject to action.

#### **Gas Segment**

The gas segment's Missouri retail rates are subject to a fuel cost adjustment clause. The gas segment is permitted to file an Actual Cost Adjustment (ACA) once a year which also includes a Purchased Gas Adjustment (PGA) filing. In addition to the ACA filing, three more optional PGA filings are allowed during the year. The gas segment's ACA year is from September 1 thru August 31 for each year. For purposes of the following discussion, a hedging year will begin November 1 and end October 31.

Specific hedge strategy goals are to provide for predictable natural gas costs over a multi-year period and to provide a framework to allow the gas segment to manage price volatility for its customers.

The RMP is designed to provide the SMG with a more comprehensive set of tools to mitigate the adverse impacts associated with changing natural gas prices.

In effect, these strategies set out to determine how much market risk is reasonable to prudently minimize price volatility, while still providing the gas segment's customers with reliable and reasonably priced natural gas supply.

An overview of the gas segment's hedging targets for natural gas is outlined below.

At least yearly, the gas segment will model its natural gas systems with a natural gas usage model to establish expected natural gas usage for each of the next five years. This budgeted gas usage will be determined in a consistent manner with that utilized in the Company's financial projections.

From time to time as conditions change (i.e. new load profiles, new customers, plant expansions, plant closings), the SMG shall re-model the gas system to establish a new "expected" gas usage for native load.

The definition of the word "hedge" in this section shall be defined as including physical gas purchases, storage, as well as financial instruments. (Physical gas purchases at Index will not be considered a hedge.)

The gas segment will utilize the following procurement guidelines to be implemented by the beginning of each hedge year:

- Hedge a minimum of 50% of year one's expected gas usage.
- Hedge up to 50% of year two's expected gas usage.
- Hedge up to 20% of year three's expected gas usage.

The SMG will hedge a minimum of 70% and have the flexibility to hedge up to 90% of each winter period's (November thru March) expected requirements while being cognizant of volume risk.

If changes in expected gas burns occur that make us more than 100% hedged in any given month, appropriate steps will be taken to reduce our hedged position to 100% or less following consideration of accounting guidance and review by the RMOC. Given that there is some uncertainty in our modeling efforts, an overhedged position of 50,000 MMBtu's or less would generally not be considered material and not subject to action.

The dollar cost averaging approach is intended to protect our customers from price volatility in the market place.

#### 5. INTERNAL CONTROLS

Internal controls are essential in ensuring adherence to the RMP and include the authorization of acceptable instruments, limits, and credit standards. Additional checks and balances including segregation of departmental duties, market position monitoring, and a management reporting structure should be in place to verify and reconcile the integrity of the Company's risk management activity results. The Company's

accounting policies and key controls relating to our hedging program are detailed in the Power & Fuel Cycle section of our Sarbanes/Oxley documentation.

#### SEGREGATION OF DEPARTMENTAL RESPONSIBILITIES

An appropriate segregation of duties is fundamental in controlling the Company's risk management operations and includes activities such as approvals, verifications, and reconciliations. A clear separation between transacting, credit review and approval, margining and cash settlements, and accounting has been established with respect to the RMP.

The SMG, Finance, and Internal Audit are the departments most directly impacted by energy supply risk management activities.

#### <u>AUTHORIZATION PARAMETERS</u>

#### **INSTRUMENTS**

A primary responsibility of the RMOC is the review and approval of tools acceptable for implementation of the risk management strategy.

The various hedging instruments that the Company is authorized to use by this RMP is described as follows:

- Physical Forward Contract Contract for future physical delivery of a designated quantity of a fuel source or power supply at a designated price, time, and location. Physical forward contracts obligate both the buyer and seller to accept the agreed-upon price, regardless of the market price when the delivery takes place. All physical forward contracts are intended to constitute a normal purchase normal sale transaction as defined in Accounting Standard Codification 815-10-15 (25-39) (formerly FASB 133 paragraph 10). A normal purchase normal sale contract is one that provides for the purchase or sale of something other than a financial instrument that will be delivered in quantities expected to be used or sold over a reasonable period in the normal course of business. These also comply with the normal purchase normal sale criteria for tax per IRS Regulation §1221(b)(2).
- <u>Futures Contract</u> Standardized binding agreement to buy or sell a specified quantity or grade of a commodity at a later date. Futures contracts are freely transferable, can be traded exclusively on regulated exchanges, and are settled daily based on their current value in the marketplace.
- <u>Put Option / Call Option</u> Contract giving the holder the right, but not the obligation, to purchase or sell the underlying futures contract at a specified price within a specified period of time in exchange for a one-time premium payment. The contract also requires the writer, who receives the premium, to meet these obligations. (Use of these instruments in a manner that precludes them from falling under hedge accounting treatment is prohibited.)
- OTC Instrument Any financial or physical instrument that is customized and created by a counterpart to replicate the risk profile associated with a commodity.

The OTC swap is a contractual agreement between two parties to exchange a series of cash flows, for a stipulated period of time, based on agreed-upon parameters and price fluctuations in some underlying commodity or market index. There is a monthly settlement price, which is the difference between the fixed price of the contract and the index price in the publication for that month's date. If the index price for the delivery period is higher than the fixed price of the OTC contract, then the seller pays the buyer the difference. If the index price is lower, the buyer pays the seller the difference. This policy approves the use of OTC forwards and options for natural gas and power. Power examples include: 5x16, 7x24, 5x8, 2x24, 7x8, 1x16, etc. (Use of these instruments in a manner that precludes them from falling under hedge accounting treatment is prohibited.)

- LTCR/ARR/TCR/FTR A financial instrument utilized to hedge the difference in the price of congestion between two settlement locations. An LTCR is a long-term (10 year minimum) congestion right providing a full year TCR into perpetuity with rollover ability. An LTCR allocation is held prior to the ARR allocation and any awarded or retained LTCRs are automatically converted into TCR products which may either be held or sold for congestion management. An ARR is a financial right, awarded during the annual or monthly ARR allocation process that entitles the holder to a share of the auction revenues or charges generated in the applicable TCR/FTR auction. The ARR holder may then sell or self-convert/self-schedule the ARRs into TCR/FTR during the annual or monthly TCR/FTR auction. ARRs are either seasonal or monthly in duration and are either on or off-peak products. ARRs are priced per auction and settled daily with monthly and annual true-ups. A TCR/FTR is defined as a financial right that entitles the holder to a share of the Day-Ahead Marginal Congestion Component price differential between two specific settlement locations. TCR/FTRs are either seasonal or monthly in duration and are either on or off-peak products. TCR/FTRs are priced hourly and settled daily with monthly and annual true-ups. ARRs and TCRs may have negative or positive values. ARRs and TCRs may be underfunded hence may be valued more or less than the underlying asset. ARR,TCR, and FTR procurement will occur on paths native to Empires source/sink settlement locations. Empire may seek to obtain a TCR/FTR on a foreign path in the event that Empire is both 1) unable to secure a TCR/FTR to mitigate all or a portion of its expected congestion for a native path and 2) able to provide sufficient analysis demonstrating a high level of correlation with a path foreign to Empire's source/sink settlement locations.
- <u>Virtual Bids/Offer</u> A proposal by a Market Participant to purchase or sell a specified quantity of energy at a specific price, settlement location, and period of time in the Day-Ahead market that is not associated with a physical resource or load. Virtual transactions are strictly financial and provide an opportunity to hedge physical load or generation. Empire may only seek a virtual bid or offer if the following conditions exist and/or are met: 1) uncertainty with expected load or physical supply (which will be logged daily in the *DA Operation Strategy Log*), 2) both source and sink settlement locations are native to Empires load and generation, 3) MW volume is less than or equal to the corresponding generator limits and/or day-ahead forecasted load (with consideration for forecasting error)

- <u>Demand Bid</u> A set of price/quantity pairs that represent the financial offer to purchase energy from the Day-Ahead market at a specific settlement location and period of time. Demand bids are strictly financial and provide an opportunity to clear physical load in the Day-Ahead market. Empire may bid in energy demand in an amount not to exceed the forecasted load for the associated operating day, with consideration for forecasting error.
- Bilateral Settlement Schedules A bilateral settlement schedule is a financial agreement between two market participants designating a purchaser and seller of an energy amount and settlement location for energy transactions or a purchaser and seller of an obligation percentage and reserve zone for operating reserve obligation transfer transactions. Empire may participate in a bilateral settlement schedule as a purchaser in an amount not to exceed the forecasted load for the associated operating day and only at native Empire sink settlement location(s). Empire may participate in a bilateral settlement schedule as a seller only at native Empire source settlement locations.
- Import Transaction / Export Transaction An import transaction or export transaction is a proposed interchange transaction to purchase an amount of energy for delivery into or outside the SPP balancing authority at a specified location and period of time, respectively.

#### LIMITS

#### AUTHORIZED TRADERS AND TRADING LIMITS

- "Round Trip" Trades Prohibited "Round trip" transactions shall be strictly prohibited. Round trip transactions, as used herein, refer to simultaneous (or nearly simultaneous) energy purchases and sales of equal duration, price and volume in an attempt to influence the market. Employees engaging in such transaction shall be subject to progressive discipline up to and including termination of employment.
- <u>Off-Premise Trading</u> Off-premise trading is not allowed. In the event of limited staff, one-time trades may be done off-premise with the approval of a senior officer.

Authorized traders, along with approval and transaction limits, are listed in Appendix 12.

#### **TRAINING**

AUTHORIZED TRADER TRAINING

 Market Participant Training - All authorized traders transacting in markets or services provided pursuant to the SPP Tariff will receive, applicable annual training with regard to their participation under the Tariff as a condition of being authorized to transact on behalf of EDE.

#### 6. POSITION REPORTING

#### **GAS POSITION REPORT**

The Gas Position Report contains a list of all open and recently closed transactions for the Company's trade-based activity and serves as a crucial element of RMP control and management. The Gas Position Report has multiple applications for risk management review that includes account transaction tracking and evaluation as well as overall performance evaluation.

The Gas Position Report is updated as transactions occur and distributed monthly by the SMG. Its primary objectives are:

- · Allow for marking individual transactions to market;
- Provide data for transactions as well as portfolio analysis; and
- Simplify accounting and program results evaluation through analysis of the closed positions list.

#### **CONGESTION POSITION REPORT**

The Congestion Position Report contains the MW and \$/MWh positions of all existing TCR/FTRs by: period (on-peak, off-peak), source and sink, and month. The Congestion Position Report will be created after the annual TCR/FTR auctions and will be updated monthly to include the monthly auction positions. The Congestion Position Report will include:

- Market value of TCR's/FTR's (TCR/FTR auction price if self-converted/self-scheduled)
- Percentage of TCR/FTR eligibility auctioned

#### MARK-TO-MARKET

All positions will be mark-to-market (using the appropriate NYMEX prices or other suitable market indicator as defined by the underlying contract) monthly or as determined by the RMOC on the Gas Position Report by the SMG. This analysis is performed to appropriately reflect the current value and cash flows associated with open positions and to provide timely information regarding the Company's market risk and exposure.

The SMG is responsible for updating the current market information in mark-to-market calculations through the Gas Position Report, with Finance performing a subsequent review as a check on this report's accuracy. On certain OTC positions, it may be difficult to obtain an accurate mark-to-market value. In these instances, the SMG will provide the best estimate of values and will identify the source and reliability of the data.

#### ADDITIONAL MANAGEMENT REPORTING

Management reports are to be based on the principles of adequate compliance limit monitoring, accuracy of data sources, and frequency and quality of information. All reports should communicate the price risks assumed by the Company. Information pertaining to performance measurement and program evaluation will be included in required reports and will be used as a basis for RMOC discussions and future strategy setting.

#### MINIMUM REPORTING REQUIREMENTS

The following table identifies the various reports to be generated by different departments or management levels, the normal regularity, and circulation of the document.

Report	Distribution	Frequency	Originator
Gas Position Reports	SMG, MFA, RMOC	Monthly & Quarter-end	SMG
ADMIS Account Statements via email	SMG, MFA	Daily - Others	RMI
RMOC Meeting Minutes	RMOC	As soon as possible after RMOC meeting (5-7 business days)	RMOC Secretary
Counterparty Credit Exposure Report	RMOC, SMG, MFA	Weekly	SMG (Reviewed by MFA)
Congestion Position Report	RMOC, SMG	Monthly (Post auction)	SMG

SMG - Supply Management Group, MFA - Manager of Fuel Accounting, RMI - Risk Management Incorporated

On a quarterly basis the status of the Company's hedged positions and counterparty credit exposure will be reviewed with the Audit Committee of the Board of Director's.

#### DISCIPLINE

Any violation by an employee of the RMP will be subject to the Progressive Discipline Policy as outlined in the Personnel Policy Manual of the Company.

#### 7. POLICY REVIEW

On a periodic basis, the RMOC will review and mutually make a recommendation to the Officer Group on the adequacy of the RMP and any necessary changes.

#### 8. CONFLICTS OF INTEREST

Personnel responsible for executing and managing the Company's trading activity will not be authorized to enter into energy-related commodity transactions on behalf of others or themselves unless specifically approved by the RMOC.

#### 9. DUTIES AND WORK FLOW

Appendices are listed as follows:

- Credit Risk and Procedures Policy Appendix 1
- Duties for Supply Management Group Appendix 2
- Duties for Finance Appendix 3
- . Duties for Auditing Appendix 4
- Work Flow to Execute Trade Appendix 5
- Procedure for Hedge Transactions and Reconciliation Appendix 6
- Trade Ticket Appendix 7
- Confirmation Procedure Appendix 8
- Gas Position Report Appendix 9
- Mark to Market Report Appendix 10
- Broker Account Statement Appendix 11
- Authorized Traders Appendix 12
- Supply Management Group (SMG) Purchase and/or Sale Pre-Approval Form
   Appendix 13

## THE EMPIRE DISTRICT ELECTRIC COMPANY

#### CREDIT RISK/PROCEDURES POLICY

<u>January 10, 2011</u>



#### I: INTRODUCTION

The purpose of this policy is to establish a consistent process whereby the credit risk of future financial loss due to counterparty physical or financial non-performance is significantly diminished for energy purchases and / or sales. This Credit Risk/Procedures Policy will govern any energy transactions relating to natural gas and / or purchased power conducted by the Company.

#### **II: POLICY OVERVIEW**

In general, all energy suppliers and / or purchasers will be subject to a financial review in accordance with the Company's standards for determination of creditworthiness. Evaluation of a company's financial strength and its ability to deliver its product or to pay is crucial.

A credit review cannot be viewed as the mechanism to prevent any and all losses, but it can help identify those companies where performance has been a problem in the past or may present a problem in the future. Established counterparty credit exposure limit triggers combined with proper monitoring oversight will help the Company to effectively mitigate possible losses due to counterparty insolvency.

#### III: RESPONSIBILTIES

#### Risk Management Oversight Committee

The Risk Management Oversight Committee (RMOC) shall give final approval for all credit policies and procedures. In today's business environment, a formularized credit rating approach for rating counterparties may not be practical. The RMOC will provide oversight by reviewing weekly Gas Position Reports produced by the Supply Management Group (SMG) and by formal discussions of counterparty credit limits, credit risk, credit exposure, etc. at the RMOC meetings. The Manager of Fuel Accounting will provide monthly credit rating status reports of counterparties. The SMG will report on credit exposure by counterparties in the monthly Gas Position Report.

#### RMOC Committee Members

This group is defined in the Energy Risk Management Policy.

#### Manager of Fuel Accounting

The Manager of Fuel Accounting (MFA) shall monitor the credit exposures created through the trading of energy and derivative products, and ensure that the RMOC is aware of any inappropriate credit exposure.

Primary Responsibilities include the following:

- On-going monitoring of existing counterparty credit/financial strength, see On-Going Financial/Credit Strength Monitoring Procedures section below
- Monitor credit exposures created by the trading of energy and / or derivative products, see On-Going Financial/Credit Strength Monitoring Procedures section below
- Oversee the development and administration of systems necessary to support the above activities
- Monitoring trade activity with each counterparty
- Monitor credit exposures with the RTOs created through the physical and financial positions maintained in the respective markets

#### Supply Management Group

The Supply Management Group (SMG) optimizes the use of generation, purchased power and natural gas as outlined in the Energy Risk Management Policy.

Primary Responsibilities include the following:

- Keeping abreast of market trade talk and communicate knowledge to the Fuel Accounting Manager
- Coordination of legal documentation appropriate for each counterparty such as Master Agreements, International Swaps Derivative Agreements (ISDA), etc.

Monitoring trade activity with each counterparty

#### Legal Services

The SMG will seek legal advice and review, internal or external, in counterparty agreement negotiations. While it is not always possible to achieve, the SMG will work with legal services to seek netting and/or set-off agreements with counterparties on all contracts.

Netting provisions allow counterparties to settle with each other the net of all transactions for a given period rather than gross amounts involved in a series of transactions. If a company buys power from a counterparty and also sells them power, the final transaction will take both aspects into consideration and pay the difference between the two. The non-defaulting party may also perform a closeout of any existing positions and include this balance in the netting calculation. This provision can eliminate a large amount of downside potential associated with counterparties that default.

Set-Off can be viewed in simple terms as netting among different governing agreements. For instance, the electric segment may be transacting both electricity and

natural gas with the same counterparty under two different governing agreements. Set-Offs allow for amounts owed or received under both agreements to be netted against each other.

#### On-Going Financial/Credit Strength Monitoring Procedures

The Manager of Fuel Accounting shall be responsible for reviewing the credit rating status of counterparties on an on-going basis. In addition, the Manager of Fuel Accounting will follow business news reports on counterparties for any potential information that may indicate a change in creditworthiness. The Manager of Fuel Accounting will also work in close contact with SMG to stay abreast of any current negative supplemental information gained from direct contact within the energy industry.

If any declining creditworthiness information develops on a counterparty, such as their credit rating is downgraded by Moody's or Standard and Poor's, the Fuel Accounting Manager will notify the RMOC of such development by email.

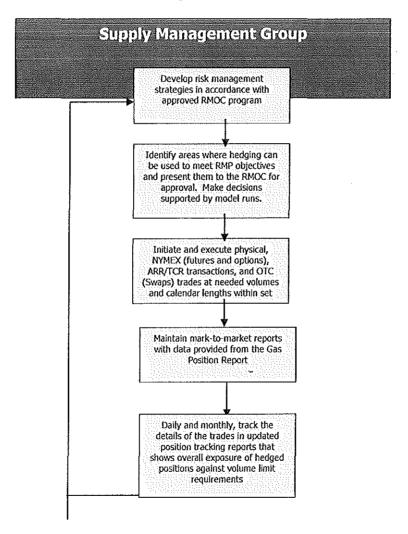
Furthermore, if a counterparty's credit rating is downgraded to below investment grade (Ba by Moody's, BB by Standard and Poor's) or below, the Fuel Accounting Manager will additionally notify the Chief Financial Officer, Controller and Vice-President/COO-Electric by phone of the downgrade. The Fuel Accounting Manager would also notify the SMG to halt any further trades with this counterparty until further notice. Any member of the RMOC could then call a special meeting of the RMOC for discussion or add this information to the agenda of the next regularly scheduled RMOC meeting.

Once a counterparty breaches the established credit exposure limit trigger, the Fuel Accounting Manager will notify the RMOC of the breach. This will be put on the agenda of the next RMOC meeting for discussion.

#### SUPPLY MANAGEMENT GROUP

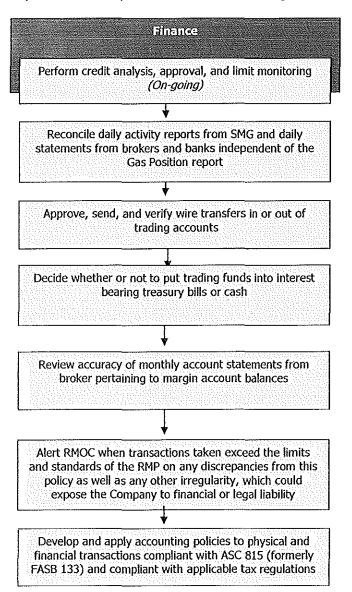
Responsible for analyzing the market and developing appropriate strategies and tactics in line with the RMP.

Responsibilities include the following:



#### **FINANCE**

Responsible for the provision of financing the SMG's hedge transactions. In addition, Finance will crosscheck hedge positions placed by the SMG in physicals, swaps, futures, and options for accuracy and accordance with the Company's RMP. Accountable for review of account balances for any associated margin requirements with day-to-day activity and also responsible for the following:



#### INTERNAL AUDIT

Review documentation as needed to verify the RMP defined limits of the Company's hedge transactions and operations and will periodically confirm the internal controls in place are effective in protecting the objectives of the Company's risk management program.

#### FOR ANY HEDGE TRANSACTION

(Physical, Exchange-Traded or OTC)

\*Please reference Appendix 6 for a graphical representation of this process

#### DAILY

- 1. Monitor Market Prices/Identify Need for a Hedge in line with Hedging Strategy Objectives
- ✓ The SMG will monitor prices for opportunities to meet RMP hedge goals and objectives.
- 2. Determine Best Strategy within Limits to Achieve Hedging Objective
- ✓ Within the RMOC approved limits, the SMG will determine the best hedge strategies to implement in line with objectives.
- ✓ For any chosen strategies that exceed a specified time period or dollar limit, the Vice President Energy Supply must verify that the chosen hedge transaction meets objectives.
- 3. Confirm Counterparty Meets Credit Requirements
- ✓ For an OTC transaction, the prospective counterparty must be crosschecked with the Approved Counterparty Credit List for credit verification.
- 4. Implement Transaction
- ✓ The SMG prepares internal documentation for current order.
- 5. Communicate Order
- ✓ The SMG executes a hedge with broker and/or counterpart by picking up the phone, sending an email, or via IM. This transaction is simultaneously recorded via a trade ticket (reference example in Appendix 7 in next section) which is date/time stamped and entered into a position tracking report and InstaNext software.
- 6. Broker Documents and Executes Transaction
- ✓ In addition, the broker and the NYMEX floor representatives keep their own trading tickets to document the transaction.
- 7. Verify Transaction (Verbal and Written)
- ✓ Broker and/or counterpart verifies hedge fill via phone initially to the SMG.
- ✓ Written confirmations will be sent to the SMG and Finance the following business day via e-mail or fax. Instant messaging is used to verify physical transactions up to one week out. The confirmation/contract is examined by the SMG Specialist for accuracy by crosschecking to the input on the trading ticket. If everything is in

agreement, the appropriate SMG representative (as defined in Appendix 12, Trading Authorities) will sign the confirmation/contract and email/fax back to the counterparty. If there are disagreements, these will be resolved and then the confirmation/contract will be signed and emailed/faxed to the counterparty. A copy of the trading ticket is made available to the Manager of Fuel Accounting to be matched up with the confirmation/contract.

# 8. Confirm Accuracy of Transaction

- ✓ The SMG crosschecks daily broker Account Statement confirmations against internal Position Report for accuracy
- ✓ The SMG provides mark-to-market reports that tracks the value of the hedge based on current market price.

## 9. Track Positions

✓ This SMG Position Report is forwarded to Finance as a check for accuracy on market value and is compared to the broker daily Account Statement report.

# 10. Reconcile Positions Daily with Broker via Finance

On a daily basis, Finance will determine and verify cash flow receipts and obligations. If the Company is on margin call, funds will be wired to the broker to keep the hedge account equity in line with the current market value.

### MONTHLY AND ON-GOING

# 1. Reconcile Monthly Account Statements

✓ Finance reconciles broker and/or counterpart statements with internal Position Report and InstaNext software.

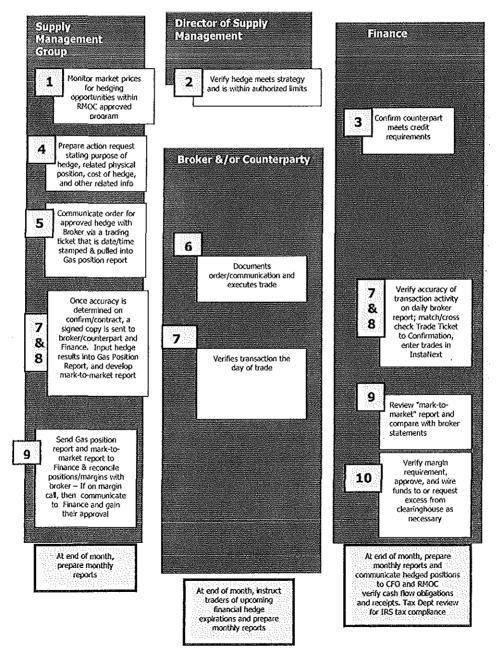
# 2. Review of Transaction/Reporting

On a monthly basis, the SMG will review with the RMOC the strategy and positions taken. On at least a semi-annual basis, the results of the RMP hedge strategy will be reported to the Board of Directors by the RMOC.

### 3. Review for Tax Compliance

On a monthly basis, the Manager of Tax or his designee will review all trade tickets for compliance with tax regulations and RMOC Policy that all physical trades meet the normal purchase normal sale criteria for tax purpose.

# PROCEDURAL FLOW FOR HEDGE TRANSACTIONS & RECONCILIATION



<sup>\*</sup>Internal Audit will periodically review process to verify accuracy and compliance

# TRADE TICKET

The ability to internally track hedge transactions is crucial to providing an audit trail whereby all parties involved in the decision-making process are notified of a hedge position. This trade ticket is the primary mechanism used to track hedges and to provide information for the Gas Position Report. A trade ticket must contain the volumes hedged, the price or instrument used, the length of time for the hedge, and the counterpart to the transaction. Once a transaction is confirmed, the Trade Ticket must be available for review by finance on the trade date.

## CONFIRMATION PROCEDURE

## **Exchange Traded Confirmations**

The SMG will confirm via instant message (IM), email, or verbally every transaction with broker and/or counterpart on the trade date. Trade confirmations on the daily open position statements will be sent by the broker (on the following business day) to the SMG and Finance. The SMG must check for accuracy on the following business day, input updates into the position report, and maintain a mark-to-market report. Finance is responsible for verifying the confirmation against the transacting records and entering the transaction into InstaNext.

# **Physical and OTC Financial Confirmations**

The SMG must confirm by instant message (IM), written, or verbally every transaction with the broker/counterpart on the trade date. For financially settled OTC transactions, written or email confirmations of the applicable terms and conditions must be made available to Finance by the end of the second business day following the trade date. Finance is responsible for verifying the confirmation against transacting records and entering the transaction into InstaNext.

For physical transactions, instant messaging (IM), verbal, or written confirmations of the applicable terms and conditions must be made available to Finance by the end of the second business day following the trade date. Finance is responsible for verifying the confirmation against transacting records and entering the transaction into InstaNext if necessary.

## The following procedures will be adhered to at all times:

- The trader will review a copy of the confirmation for completeness.
- SMG will enter/import the trade into the Gas Position Report. The Fuel Accounting Manager will enter all financial trades into InstaNext.
- Confirmations will be completed, signed, and sent to the counterparty by the SMG within two business days.
- Trade tickets and confirmations will be stored in our system of record.

# APPENDIX 9 POSITION REPORTS

The Empire District ELECTRIC Company Gas Position Summary as of September 29, 2003											
	October	November	December	Oct-Dec	Year 2007	Year 2008	Year 2009	Year 2010	Year 2011	2012 thru 2013	Net
	2006	2008	2006	2008	60% min	40% min	20% min	10% min	0% min	0% min	All Years
Eudget DTh (3)	8,100	90,400	593,500	692,000	9,700,000	10,640,300	11,103,400	8,796,600	8,798,600	17,593,200	67,322,100
Expected DTh (3)	200,000	200,000	593,500	993,500	10,363,900	10,640,300	11,103,400	8,875,200	8,875,200	17,593,200	68,444,700
Policy minimum hedged DTh (2)	120,000	120,000	356,100	596,100	6,218,340	4,256,120	2,220,680	887,520			14,178,7€0
Policy maximum hedged DTh	200,000	200,000	593,500	993,500	8,291,120	8,512,240;	8,882,720	7,100,160	-	1-1	33,779,740
Amount Hedged from Upside Volatility Dth	100,000	170,000	520,000	790,000	7,249,980	4,300,000	3,696,000	3,696,000	3,698,000	2,400,000	25,827,980
percentage	50%		88%	80%	70%	40%		42%	42%		38%
Bookout per physical Dth, all positions	7.295		11.150	8.955	6.827	6,635					6,168
Average Cost per Dth hedged	7.295		6.682	6.860	6.561			5.422			6.153
Net All Positions Marked to Market \$ (1)	(368,400)	(417,750)	(581,472)	(1,367,622)	(4,123,250)	(918,320)	2,842,314	2,795,768	2,806,411	(824,703)	1,210,598
PHYSICAL HEDGES				-		:					
  Purchased Dth	100,000	100,000	100,000	300,000	4,559,980	3,100,000	1,696,000	1,698,000	1,698,000	2,400,000	15,447,980
Purchased S	729,500	729,500	729,500	2,188,500	32,724,285	22,751,500	10,998,400	10,998,400	10,998,400	17,508,000	108,167,485
Purchased S/DTh	7,295	7.295	7,295	7,295	7,176			6,485	6.485		7.002
Market S	361,100	424.260	533,560	1,318,920	27,006,395	19,650,650	10,626,014	10,600,468	10,600,911	16,683,297	96,486,655
Market S/Dth (on Southern Star Pipeline)	3,611	4.243	5,336	4,396	5.922	6,339	6.265	6,250	6,251	6,951	6.246
Gain/(Loss) versus current market	(368,400)	(305,240)	(195,940)	(869,580)	(5,717,890)	(3,100,850)	(372,386)	(397,932)	(397,489)	(824,703)	(11,680,830)
FINANCIAL HEDGES											
Swap/Futures Dth Purchased	0	-	350,000	350,000	2,400,000	1,200,000	2,000,000	2,000,000	2,000,000		9,950,000
Net Cost, \$/Dth	0.000	0.000	5.643	5.111	4,779	4.635	4.520	4,520	4,520	0.000	4,617
Market S/Dth (at Swap location)	0,000	0.000	4,897	4.358	5,700	6.454	6.127	6.117	6.122	0.000	5,998
Swap Settlement - Receipt / (Payment)	-	(2,610)	(260,932)	(263,542)	2,211,181	2,182,530	3,214,700	3,193,700	3,203,900	-	13,742,468
Swap/Futures Dth Sold or Settle		_	i						,		
Net Cost, \$/Dth	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-
Market S/Dth (at Swap location)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Swap Settlement - Receipt / (Payment)	- 1	- 1	- 1	- 0.000	0.000	0.000	0.000	0.000	0.000	0.000	.
Call Dth (Buy a Call)		70,000	70,000	140,000	290,000	_				_	430,000
Call Strike \$/Dth	0,000	9.600	11.000	10.300	11,624	0.000	0.000	0.000	0.000	0,060	11,193
Market S/Dth (at Henry Hub or Swap location)	0,000	5.620	7,345	6.483	7,838	0.000	0,000	0.000	0.000	0.060	7.396
Cost of Call S/Dth	0.000	1.570	1.780	1.675	2.126	0.000	0.000	0.000	0,000	0.000	1.979
Value \$ of Call Position		. 1		. ]				-			0
(Cost) \$ of Call Position		(109,900)	(124,600)	(234,500)	(616,540)	-		-	-	- 1	(851,040)
		1		1			1				

Empire District GAS Company Gas Position Summary as of September 29, 2006															
	Beginning Storage	October 2006	November 2006	December 2006	Jaruary 2007	February 2007	March 2007	April 2007	May 2007	June 2007	პ <i>ს</i> კ 2007	August 2007	September 2007	Net 12 Months	Winter Season
Tariff Sudget OTh (3)	0.0.0,0	235,187	639.351	971,444	1,062,152	826,794	654,058	335,237	185,416	135,804	126,905	123,268	118,543	5,415,163	4,153,799
Tar# Expected OTh (3)		235,187	1 1	971,444	1,062,152	826,794	654,658	335,237	186,416	135,804	126,905	123,268	118,548	5,415,163	4,153,799
Storage Activity DTh (2)		_	-347,130	-347,130	-347,130	-347,130	-347,130	- 1	-	-	-	-	-	-1,735,652	-1,735,652
Net Requirement, DTh		235,187	292 221	624,314	715,022	479,664	306 928	335,237	185,416	135,604	126,905	123 268	118,548	3,679,511	2,418,147
Amount Hedged Oth	!	234,670	507,130	687,133	727,133	587,142	507,138	0	-	-	-	-	•	3,250,348	3,015,676
percentage	1	100%		71%	65%	71%	78%	0%	<b>6</b> %	0%	0%	0%	0%	60%	73%
Average Cost per Dth hedged		3,603	6,865	7.553	7.905	7.505	7.340	0.000	0.000	0.000	0.000	0.000		7.197	7.477
Net All Positions Marked to Market \$ (1)	i i	4,135	(354,740)	(749,138)	(911,776)	(511,793)	(339,393)	-	- 1	-		-	- (	(2.862,705)	(2,866 840)
				İ			-		1	1			Avg cost net o	fBass >>>	7.313
STORAGE Balances (ಕಾರ-ಸೆ-ಸಾಬರ್ಗ) ಅನೆಗಾಜಿಕ	e) ( <del>5</del> )		[	-	1	1		·	1	}	\ \ \	1	1		1
S Star Storage Dth S Star Storage S	<b>752,</b> 189 5,169,537	752,169	609,689	467,149	324,629	182,103	39,589	39,589	39,589	39,589	39,589	39,589	39,569		
S Star Storage (Avg) \$-DTh	6,873		1				i				1				
PEPL Storage Oth PEPL Storage \$ [PEPL Storage (Avg) 5:DTh	709,195 4,847,266 6,835	709,195	574,821	440,447	306,074	171,700	37.326	37,326	37,326	37,326	37,32 <del>6</del>	37,326	37.326		
ANR Storage Oth ANR Storage 5 ANR Storage 5 ANR Storage (Avg) S/OTh	370,693 2,465,295 6,651	370,693	300,456	230 220	159,983	89,747	19,510	19,510	19,510	19,510,	19,510	t9,510	19,510		
Total Storage Dth Total Storage \$ Total Storage (Avg) \$.0th	1,832,077 12,482,093 6,813	1,832,077	1,484,947	1,137,816	790,865	443,555	96,425	96,425	96,425	56,425	96,425	96,425	95,425		
Target Salance (95% of Cap.) percent of Target	1,910,853 96%:	96%	78%	60 <del>%</del> .	41%	23%	5%	5%	5%	5%	5%	5%	5%		
PHYSICAL PROCURED	1							Ì			1				Ì
Purchased Dth Purchased 5 Purchased SOTh		234,670 845,497 3,603	619,100	210,093 1,554,667 7,403	220,003 1,707,618 7,762	160,012 1,202,493 7,515	100,006 740,737 7,497	0 0 0.000	0.000	0.000	- - 0.000	5.000	0.000	1,024,696 6,670,102 6,509	790,026 5,824,615 7,373
FWANCIAL HEDGES															
Swap/Futures Oth Purchased Net Cost, \$0th		0,000	60,000 8.285	130,000 9,773	160,000 10,470	80,600 10,488	60,000 10,280	0.000	0.000	0.000	0.000	0.000	0.000	490,000 9.997	493,000 9,997

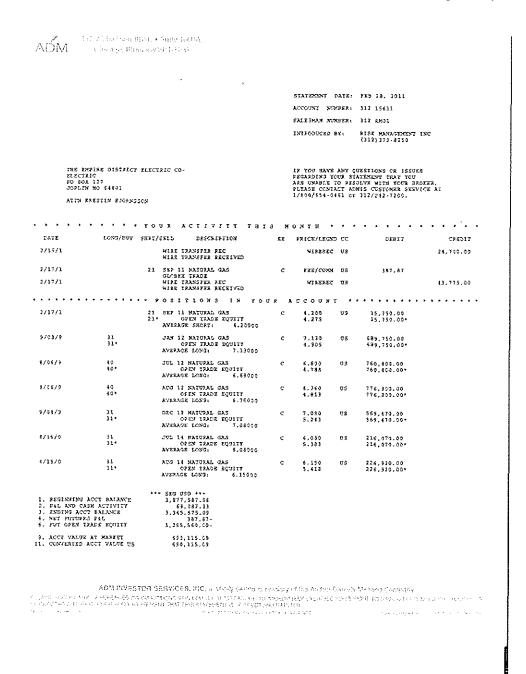
	Congestion	Position	Ove	rviev	<b>⊽</b>		
Class	Source	Sink	Unit	Nov-16		Spring 17	Max Gen
TCR Auction %	THE PROPERTY OF THE PROPERTY O			100%	60%	60%	terri liminista entrepres Escripto de la comercia.
OFF	Asbury	Empire's LOAD	WW	135	126	135	195
residential de la companya del companya del companya de la company	Asbury	Empire's LOAD	\$/MWh	\$0.07	\$0.47	\$0.50	133
	Energy Center	Empire's LOAD	MW	0	0	0	270
	Energy Center	Empire's LOAD	\$/MWh	\$0.00	\$0.00	\$0.00	270
	Elk River Wind	Empire's LOAD	MW	' 145	147	145	150
	Elk River Wind	Empire's LOAD	\$/MWh	\$2.50	\$1.76	\$1.67	100
	latan	Empire's LOAD	MW	79	135	89	182
**************************************	latan	Empire's LOAD	\$/MWh	\$3.47	\$1.83	\$1.86	3097/94/97/94/97
	Meridian Wind	Empire's LOAD	MW	0	23	0	105
	Meridian Wind	Empire's LOAD	\$/MWh	\$0.00	\$1,63	\$0.00	\$ 10 MH 2
	Ozark Dam	Empire's LOAD	MW	0	0	49	20
William Committee and the committee of t	Ozark Dam	Empire's LOAD	\$/MWh	\$0.00	\$0.00	\$0.45	Active Control (Control (Contr
	Plum Point	Empire's LOAD	MW	100	95	96	100
	Plum Point	Empire's LOAD	\$/MWh	\$1,63	\$1.00	\$0,94	
	Riverton	Empire's LOAD	MW	0	0	0	302
	Riverton	Empire's LOAD	\$/MWh	\$0.00	\$0.00	\$0.00	
	StateLine	Empire's LOAD	MW	0	0	. 0	390
	StateLine	Empire's LOAD	\$/MWh	\$0.00	\$0.00	\$0.00	
Net TCR Position				458	525	514 ·	
Market Value of TCR's		and a limit of the form of the state of the	Control of the contro	\$310,425	\$1,074,150	\$466,672	\$1,851,247
PEAK	Asbury	Empire's LOAD	MW	135	131	125	197
	Asbury	Empire's LOAD	\$/MWh	\$0.35	\$0.33	\$0.30	
	Energy Center	Empire's LOAD	MW	0	0	0	270
	Energy Center	Empire's LOAD	\$/MWh	\$0.00	\$0.00	\$0.00	
	Elk River Wind	Empire's LOAD	MW	148	147	145	150
	Elk River Wind	Empire's LOAD	\$/MWh	\$2.76	\$1,27	\$1.34	
	latan	Empire's LOAD	MW	114	193	124	182
	latan	Empire's LOAD	\$/MWh	\$3,75	\$1.33	\$1.58	
	Meridian Wind	Empire's LOAD	MW	2	24	3	105
	Meridian Wind	Empire's LOAD	\$/MWh	\$4.39	\$0.99	\$1.22	500 (500 (500 (500 ))
	Ozark Dam	Empire's LOAD	MW	0	0	19	20
	Ozark Dam	Empire's LOAD	\$/MWh	\$0.00	\$0.00	\$0.28	Service serve
	Plum Point	Empire's LOAD	MW	100	96	86	100
	Plum Point	Empire's LOAD	\$/MWh	\$1.94	\$0.69	\$0.74	
	Riverton	Empire's LOAD	MW	0	60.00	0	302
	Riverton	Empire's LOAD	\$/MWh MW	\$0.00 <b>0</b>	\$0.00 <b>0</b>	\$0.00 <b>0</b>	
200 ptd. Commission graphs of the U.S. (Claude U.S.)	StateLine	Empire's LOAD	MW \$/MWh			\$0.00	390
L TOO B	StateLine	Empire's LOAD	-γμνιννη	\$0.00	\$0.00		
Net TCR Position				499	591	502	dd 400 000
Market Value of TCR's				\$364,301	\$782,851		\$1,483,633
Fotal Value of TCR's				\$674,726	\$1,857,001	\$803,153	\$3,334,880

## MARK-TO-MARKET REPORTING

As mentioned previously, all positions will be "mark-to-market" (using the appropriate NYMEX prices as defined by the underlying contract) weekly. This analysis is performed by the SMG to appropriately reflect the current value and cash flows associated with open positions and to provide timely information regarding the Company's market risk and exposure. The SMG is responsible for verifying the validity and accuracy of the market data used in mark-to-market calculations through the Gas Position Report on a monthly basis. All positions will be "marked-to-market" (using the appropriate NYMEX prices as defined by the underlying contract) at the end of each month using InstaNext accounting software by the Manager of Fuel Accounting. The resulting entries will then be recorded in the Company's general ledger

# DAILY BROKER ACCOUNT STATEMENT

The RMI Account Statement shown below is an illustration of the daily report that the SMG and Finance can access on the Internet daily to confirm the previous day's trading activities. Separate accounts are maintained for the electric and gas segments.



# APPENDIX RS-1 CONFIDENTIAL 4 CSR 240-2.135(2)(A)2

# **APPENDIX 12**

# HIGHLY CONFIDENTIAL IN ITS ENTIRETY

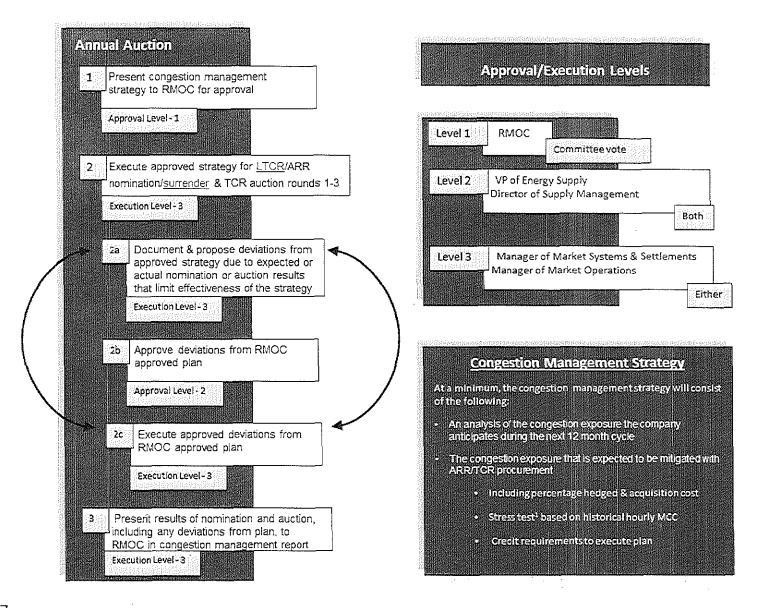
# APPENDIX 13 Supply Management Group Purchase and/or Sale Pre-Approval Form

This form is to convey pre-approval of the Officers or RMOC for purchases and/or sales that are beyond the approval limits of the members of the Supply Management Group as set forth in *Appendix 12 - Trading Authorization* of the Energy Risk Management Policy.

Approval for:		(circle one) Purchase		(circle one) Nat Gas	
		Sale		Power	
Quantity		Minimum Maximum			
Price		Minimum Maximum			
Timeframe		Months Years	<del></del>		
				Minimum_\$	Total \$ Value
				Maximum \$	-
Other Commer	nts:				
Approval is val	id until:				
Signatures	Name:		Nama:		
oignataros			Title:_		
			Date:		

### **APPENDIX X**

# Annual LTCR/ARR/TCR/FTR Approval Process



# APPENDIX Y

# Monthly ARR/TCR Approval Process

