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Appendix 1

NorthWestern Energy
Electric Supply Hedging Strategy

Redacted

The hedging strategy set forth in this Appendix is provided for Commission consideration. Given that this proposed formal approach to term financial hedging, taken in its entirety, differs from current practice, NorthWestern looks forward to the MPSC's comments prior to moving forward with implementation. This strategy, conceptually similar to the strategy that is implemented for the natural gas supply portfolio, would serve several key purposes including: dampening the effects of market price volatility, increasing price stability for ratepayers, and improving the probability of cost recovery for NorthWestern. The information regarding procurement strategies discussed below is provided for planning purposes and is based on current market conditions. Accordingly, it is subject to change. If NorthWestern does deviate from these procurement strategies it will document the reasons.

The hedging strategy discussed in this Appendix is intended to help facilitate the achievement of what NorthWestern understands to be a priority of the Montana Public Service Commission – obtaining greater price stability for ratepayers. Price stability can be achieved through dampening the effects of shorter-term market volatility and obtaining long-term fixed price supply contracts. The 2007 Plan as a whole sets the stage for implementing actions for longer-term stability. This Appendix provides a structured approach with specific measures and timelines that sets forth a guided, disciplined approach to energy supply procurement over a rolling *(redacted)* period. Adhering to this procurement strategy will eliminate adverse situations that can arise when a material volume of energy supply resources is about to expire and no alternative has been identified or implemented. While this systematic approach seeks to mitigate supply price volatility, it cannot protect customers from electric market price trends.

This procurement strategy would assemble a portfolio of energy supply resources and purchases that are reflective of market conditions over time, not market conditions at

one specific point in time. In doing so, price volatility will be reduced which will in turn provide more stable supply prices for customers. This portfolio approach to resource procurement will result in a set of resources that may not contain either the lowest or highest possible cost, but rather a blended value derived from market conditions over a wide time spectrum.

Throughout this Appendix when discussing "hedging", "fixed price hedges", "locking in", or other similar terms, we are referring to the price of the supply and not necessarily the actual electrons. This strategy will provide the needed flexibility to take advantage of favorable buying opportunities to "lock-in" or financially hedge material amounts of supply when market conditions dictate.
Finally, physical "fixed for float" and financial swaps will be the primary transactions to lock-in the price of underlying physical purchases but no other financial derivatives will be employed.

Hedging Plan Going Forward from 2008

The goal of NorthWestern's hedging strategy is to dampen electricity price volatility in an effective, systematic, and efficient manner. NorthWestern currently purchases the majority of its physical electricity through longer-term resource and market purchase contracts with the remaining volumes purchased in the medium and short-term markets. The hedging strategy NorthWestern proposes for this plan involves three main areas:

1) Entering into systematic and defined market purchases based on portfolio metrics and timelines while taking into consideration resource and asset development activities;
2) Entering into physical exchanges and intra-day physical swaps that provide physical energy at times when it is most needed; and
3) Setting "hard target" price values that supplement other hedging techniques and allow for increased purchases of fixed price electricity.

Systematic and Defined Market Purchases

Fixed price market transactions will be utilized to fill gaps in the portfolio where long-term resources and contracts are not sufficient to provide adequate price protection. These systematic and defined purchases with firm timetables are intended to provide the

necessary discipline and direction to avoid the volumetric exposure mentioned earlier. In addition, this structured approach to making market purchases will limit the amount of supply that is procured in the hourly or spot market, which is the most volatile market for procuring electricity. Finally, the parameters or operating ranges employed will provide the needed flexibility to take advantage of down turns in the market by allowing for the procurement of larger volumes of supply when the market is viewed as being favorable. Below are the metrics and timelines that will be followed for entering into fixed price transactions:

1) Prior to the beginning of each calendar quarter, at least *(redacted)* % of forecasted supply needs for each of the following *(redacted)* quarters *(redacted)* must be fixed price hedged. This will be calculated on an energy basis using normal weather. Unit-contingent resources will be forecasted at historical capacity factors after taking into consideration planned maintenance outages.

2) Prior to the beginning of each quarter, at least *(redacted)*% of the forecasted supply needs for that quarter must be fixed price hedged. This will be calculated on an energy basis using normal weather. Unit-contingent resources will be forecasted at historical capacity factors after taking into consideration planned maintenance outages. Should a unit-contingent resource become inoperable during a quarter, replacement energy may be purchased in the term or spot markets.

3) Prior to the beginning of each month, at least *(redacted)*% of the forecasted supply needs for that month must be fixed price hedged. This will be calculated on an energy basis using normal weather.

4) Under normal conditions, it is NorthWestern's intent to not have an energy portfolio that is greater than *(redacted)*% of expected needs during the proposed hedging periods. Other than this ceiling, there is no upper limit on the amount of fixed price energy that may be procured for the *(redacted)* look-ahead periods.

Physical Exchanges and Intra-Day Physical Swaps

Energy exchanges and intra-day swaps are products that allow physical energy to be procured when it is needed most and in the location where it is needed to serve load. Below is an example of an intra-day swap:

Mid C for NorthWestern System Intra-day Physical Swap

Delivery Period:	**January**		**February**		**March**		**July**		**August**	
Delivery Point:	Mid-C	NWE System	Mid-C	NWE System	Mid-C	NWE System	Mid-C	NWE System	Mid-C	NWE System
Hour Ending (HE), PPT	**Contract Quantity** (MWh/hr)	**Contract Quantity** (MWh/hr)	**Contract Quantity** (MWh/hr)	**Contract Quantity** (MWh/hr)	**Contract Quantity** (MWh/hr)	**Contract Quantity** (MWh/hr)	**Contract Quantity** (MWh/hr)	**Contract Quantity** (MWh/hr)	**Contract Quantity** (MWh/hr)	**Contract Quantity** (MWh/hr)
HE 7	*(Redacted)*	(Redacted)	*(Redacted)*	(Redacted)	*(Redacted)*	(Redacted)	*(Redacted)*	(Redacted)	*(Redacted)*	(Redacted)
HE 8										
HE 9										
HE 10										
HE 11										
HE 12										
HE 13										
HE 14										
HE 15										
HE 16										
HE 17										
HE 18										
HE 19										
HE 20										
HE 21										
HE 22										

In this example, NorthWestern purchases *(redacted)* power at Mid C and delivers it to the counterparty to the transaction at Mid C. *(redacted).* In return, NorthWestern receives "shaped" energy on the NorthWestern transmission system in the hours and volumes shown above. Each month NorthWestern receives different volumes of energy in different hours; the volumes and hours are reflective of when the energy is needed most by NorthWestern to serve forecasted load.

There is a value differential to NorthWestern that is derived from the *(redacted)* energy received and the *(redacted)* energy delivered to the counter party. When structuring this type of deal the underlying value of the energy is not considered; only the value differential *(redacted)* of energy is monetarily exchanged. The advantage of this product is that it provides capacity when it is needed most and in doing so helps free up Basin Creek to be used for other applications.

A physical exchange is merely trading a flat block of power at Mid C or another trading hub for a flat block of power on the NorthWestern transmission system. The value from a physical exchange is derived from avoiding the transmission costs to move power from one location to another. With most of our physical hedging activities occurring at Mid C, physical exchanges provide a cost effective, efficient way to move physical energy to the NorthWestern system in order to serve load.

Hard Targets

In addition to the systematic and defined market purchase strategy discussed above, a "hard target" mechanism will be utilized to trigger additional fixed price market purchases for forward delivery. These targets will be set at levels deemed to be "favorable" to customers. This reflects the fact that at some "low" price there may be no desire to have exposure to floating or index prices. NorthWestern proposes that hard targets be reviewed and updated as part of the biennial planning process to reflect changes in the market.

At any time during 2008 and 2009, if market purchases for forward delivery from that point in time through the end of 2012 reach the levels below, the following percentage of energy that is still subject to market prices should be fixed price hedged.

Longer term	
Hard Targets (2008 / 2012)	**% of Supply**
(Redacted)	*(Redacted)*

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Appendix 2

ABBREVIATIONS

AC	Alternating current
AMI	Advanced Metering Infrastructure
AMPS	AMPS line to Idaho
aMW	Average megawatts
ARM	Administrative Rules of Montana
ASU	Air separation unit
AWS	Archimedes Wave Swing
BACT	Best Available Control Technology
BPA	Bonneville Power Administration
CAES	Compressed Air Energy Storage
CAMR	Clean Air Mercury Rule
CCCT	Combined Cycle Combustion Turbine
CCS	Carbon Capture and Sequestration
CERA	Cambridge Energy Research Associates
CHP	Combined Heat and Power
CO_2	Carbon dioxide
CREP	Community Renewable Energy Project
CT	Combustion turbine
CTED	Washington Dept. of Community, Trade & Economic Development
DC	Direct current
DSI	Direct Service Industry
DSM	Demand Side Management
EIA	Energy Information Administration
EPP	Electric Procurement Plan
EPRI	Electric Power Research Institute
ETAC	Electric Technical Advisory Committee
FERC	Federal Energy Regulatory Commission
GHG	Greenhouse gases
GWh	Gigawatt hour
IGCC	Integrated Gasification Combined Cycle
IOU	Investor Owned Utility
IPC	Idaho Power Company
IPP	Independent Power Producer
IRP	Integrated Resource Plan
kW	Kilowatt
LCRF	Levelized Capital Recovery Factor
MAPP	Mid-Continent Area Power Pool
MATL	Montana Alberta Tie Line
MCA	Montana Code Annotated

MCC	Montana Consumer Counsel
MCT	Marine Current Turbines, Ltd.
Mega-	Prefix meaning million
MG	Montana Generation, LLC
MIT	Massachusetts Institute of Technology
mmbtu	Millions of British thermal units
MOU	Memorandum of Understanding
MPSC	Montana Public Service Commission
MSTI	Mountain States Transmission Intertie
MW	Megawatt
MWh	Megawatt hour
NEEA	Northwest Energy Efficiency Alliance
NOx	Nitrous oxide
NRF	Northwest Regional Forecast
NW	Northwest
NWE	NorthWestern Energy
NWPCC	Northwest Power and Conservation Council
NYMEX	New York Mercantile Exchange, Inc.
O&M	Operation & Maintenance
PAC	Pacificorp
PC	Pulverized coal
PGE	Portland General Electric
PNUCC	Pacific Northwest Utilities Conference Committee
PPA	Power Purchase Agreement
PPL	Pennsylvania Power & Light
PRS	Preferred Resource Strategy
PSC	Public Service Commission
PSE	Puget Sound Energy
PUC	Public Utility Commission
PUD	Public Utility District
QF	Qualifying Facility
REC	Renewable Energy Credit
REP	Residential Exchange Program
RFP	Request for Proposals
ROD	Record of Decision
RPS	Renewable Portfolio Standards
SCCT	Simple Cycle Combustion Turbine
SCL	Seattle City Light
SOx	Sulphur dioxide
TISEC	Tidal In-Stream Energy Conversion
TOU	Time of Use
TPVRR	Total Present Value of Revenue Requirements
USB	Universal System Benefits
WAPA	Western Area Power Administration
WECC	Western Electricity Coordinating Council
WREGIS	Western Renewable Energy Generation Information System