

MANITOBA HYDRO

Corporate Risk Management Middle Office Report Sept 2009

A. Credit

On-going review and advisory support continued to be provided to PS&O (Power Sales and Operations) credit function to assist in revising and updating its credit policy and procedures. The policy and procedures (once approved by EPRMC and PSOMC) would result in revised counterparty credit limits. The revisions will be based on Global Credit Services credit scoring software and the revised policy and procedures. Corporate Credit Risk Management is also providing concurrent support to PS&O credit function.

B. ICF Consulting Assignment - Independent Review of Export Sales and Associated Risks

Middle Office continued coordinating additional information requirements and report drafts. The final report was provided by ICF on September 11th.

C. Long Term Export Sales

Some procedures and processes could be further improved and should be formally documented for long term export negotiations. Export Power Marketing has developed some preliminary improvements which have been discussed with Middle Office.

Middle Office recommends development of the improvements be completed and implemented if possible prior to the Auditor General's Office conducting their audit.

D. MISO Market Conditions

The average load in the MISO market declined 14.5% for July 2009 compared to July 2008. The decline in load for August 2009 compared to August 2008 lessened, down just over 6%.

Average MISO system wide prices have declined more than 60% comparing July 2009 to July 2008 and 58% comparing August 2009 to August 2008. During July day ahead prices were negative at Minn Hub for a total of 9 hours due to high congestion.

PIRA's most recent price outlook for Minn Hub during October, November, December 2009 has declined 24%, 10% and 15% respectively for each month.

E. Day Ahead/Real Time Transactions

We are unable to conduct risk assessment, transaction evaluation and trader compliance for day ahead and real time transactions due to the way Webtrader (the deal capture system) was set up for these transactions.

These transactions are not captured by Webtrader in the same way as bilateral transactions are when traders enter into deals. This module was set up for billing/accounting purposes and the transactions are entered and identified by staff in Billing Services rather than being trader based. The deals are created at the time invoices are received from the MISO market and entered by the Billing Department of PS&O.

Because of the way this module was designed it is difficult to determine the actual volume and price of an individual trade and who entered into the deal or if policy is being adhered.

This module design presents a risk to the ability to conduct oversight and compliance. It should be noted that it may also present problems in the ability to set up an appropriate compliance program for FERC market manipulation. It would likely be costly to change at this stage.

F. Short Term Transactions

COMPLIANT

The table below outlines total volumes and average price for contracts entered into by Power Trading during the period June to August 2009.

Short Term Transactions								
Up to the late of 5 months or next March 31st								
MW per hour	On-Peak				Off-Peak			
	June	Actual July	Aug	Projected Sept	June	Actual July	Aug	Projected Sept
<i>Forecast Supply 1</i>	933	634	734	783	1,792	1,828	767	1,708
Volume Approved for Sale	500	400	400	500	500	500	300	200
Physical Bilateral Sales (New)	100	-	50	160	-	-	25	25
Physical Bilateral Sales under existing Long Term Contracts					15	15	15	15
Avg Price (\$ US)	35.00	-	32.22	23.29	14.59	14.59	16.34	17.92
Financial Bilateral Sales (New)	0	0	0	0	0	0	0	0
Financial Sales under existing Long Term Contracts			150					
Avg Price (\$ US)	-	-	34.57	-	-	-	-	-
Avg Index Price (\$ US)	19.48	18.80	20.27	18.78	8.23	9.08	9.30	9.47
Remaining Surplus	400	400	200	340	485	485	260	160
¹ Avg 50% Peak								

Risks associated with these transactions are primarily price and volume. Applicable policy/control requirements are outlined in Appendix A for reference.

G. Surplus Energy/Forward Position**FORWARD POSITION REPORT
October to December 2009**

MWh	Oct	Nov	Dec
Dependable Book ¹	241,515	221,025	230,230
Term Book ¹	10,416	13,920	4,176
	251,931	234,945	234,406
Avg Price Dependable Book ²	\$37.48	\$36.62	\$36.62
Avg Price Term Book ²	28.00	31.00	32.00
Forecast Prices U.S. MWh ³	\$21.00	\$30.75	\$36.75

¹ Includes On peak and Off peak² Avg Price On peak³ On Peak as at Aug 9, 2009**Energy Surplus Position - Oct to Dec 2009
Surplus Quantities Approved for Sale**

MW per hour	Oct	Nov	Dec
ON PEAK			
Forecast Surplus¹			
Avg (50% Peak)	977	504	89
Peak	820	775	431
Quantities Approved for Short Term Sales			
New Short Term Sales Made To Date	21	29	0
Short Term Sales flowing under existing Long Term Contracts ²	0	0	150
Remaining surplus from Quantities Approved	479	271	50
OFF PEAK			
Forecast Surplus¹			
Avg (off-peak)	1,011	51	910
Quantities Approved for Short Term Sales			
New Short Term Sales Made To Date	21	29	29
Short Term Sales flowing under existing Long Term Contracts ²			
Remaining surplus from Quantities Approved	79	71	71

¹ Various run dates used in decision-making² These sales done based on availability of surplus

H. Related Merchant Transactions

POSSIBLE NON COMPLIANCE

For the two months June and July Webtrader reports show surplus positions (more mwh purchased than sold). June is particularly significant at almost 27,000 MWh. Webtrader monthly reports shows a material loss of over \$1 million for the month of June.

We will report back on this issue once it has been resolved. It may be that non related transactions have been included in this book.

The attached table summarizes relevant information on the transactions for the period. Applicable policy/control requirements are outlined in Appendix B for reference.

The transactions involve trading energy purchased, not generated by the corporation. The volume of transactions is currently limited by the capacity of the related transmission positions (short and long term).

Risks associated with this activity, include the risk that the energy may not be accepted by the Canadian market, pricing may change in the Canadian market between the time energy is purchased in the day ahead market in U.S. and delivery of the sale into Canadian market at hourly or pre-dispatch price). In addition, a net position other than zero (purchases net of sale) may result in financial exposure. We would consider it to be a pure merchant transaction, which have not been approved at this time.

**Middle Office Compliance Report
Related Merchant Transactions
June to August 2009**

	June		July		August	
	Total MWh	Total Settlement	Total MWh	Total Settlement	Total MWh	Total Settlement
US/CDN Market						
Purchases[1]	64,144	1,817,426	88,364	1,724,018	60,371	940,451
Sales	<u>37,216</u>	<u>1,021,807</u>	<u>83,906</u>	<u>2,628,686</u>	<u>60,371</u>	<u>1,713,393</u>
Net Position	26,928		4,458		0	
Total Trading Gains/(Losses)[2]		-795,619		904,668		772,942
Profit Share to Third Party						
<u>Other[3]</u>						
Purchases	9,555	267,602	6,540	186,425	8,149	234,218
Sales	9,555	<u>293,500</u>	6,540	<u>192,435</u>	8,149	<u>291,686</u>
Total Trading Gains/(Losses)		25,898		6,010		57,468
Profit Share to Third Party						
Transmission & Market Costs[4]						
Net Profit/(Loss)		<u>(1,206,424)</u>		<u>129,790</u>		<u>520,841</u>

[1] CDN dollar sales converted to US at Webtrader rate

[2] Before transmission and market costs

[3] Purchases not accepted by CDN market and sold back into US

[4] Source: Webtrader monthly summary

Short Term Contracts - Related Policy

A. System Energy & Related Products - Management Control Plan¹

“System energy products include physical bilateral contracts, day ahead market and real time market power transactions and related products. The underlying intent for these transactions is the physical delivery of power to or from Manitoba Hydro’s system.”

Forward sales and purchase contracts, two weeks and longer in duration are formalized in writing in accordance with the applicable Master Agreement. The power trader or marketer negotiates these forwards sales using industry pricing indicators as a guide.”

Pricing

- As a minimum, Hydro will require recovery of 110% of its incremental costs in making any short term forward sale commitment. The power trader or marketer uses this information along with industry pricing indicators to negotiate forward contracts.

Transaction Limits

- No specific limits established in the Management Control Plan for short term physical forward sales.

B. System Financial Products

Put and call options, swaps and bilateral contracts for differences for power or natural gas for the purpose of managing the uncertainty in available generation or load forecast or fuel supplies for Hydro’s power supply assets. In addition, these products may be used to enter into favorable forward sales or to minimize exposure to price volatility on power and gas purchases.

Permitted Financial Products

- Put and call options, swaps, and bilateral contracts for differences. Financial Transmission Rights, auction revenue rights, virtual bids and offers and bilateral contracts registered as financial schedules.

Volume Limits

- Cannot exceed the projected underlying physical position.

¹ Approved by the Board of Directors November 22, 2007

C. Approval Authority

Transactions from existing generation or purchase from 15 calendar days up to the later of 5 months or the next March 31st:

Power Sales & Operations Market Committee or Division Manager Power Sales & Operations for volumes for purchase or sale *and*,

Manager, Power Trading or Financial Trading Supervisor for transactions.

D. Confirmation Method

Either orally or through electronic communication or approved electronic platform followed up by written confirmation. The Management Control plan states that written contracts are reviewed, approved, and signed in accordance with the approval authority requirements noted above.

Related Merchant Transactions - Related Policy

A. Merchant Transactions - Management Control Plan

Resale of power purchased from third parties and which either flows over transmission owned or reserved by/for Manitoba Hydro or was purchased for Manitoba Hydro system requirements and has subsequently been deemed surplus.

Transaction Limits

- Maximum net power position of 1000 GWh
- Fixed price to fixed price transactions may be entered into only if there is a positive profit margin
- All other transactions may be entered into only if there is a positive expected value and with a term no more than three days in duration.
- Maximum duration six months

B. Approval Authority

- Merchant Energy Products up to and including 14 calendar days in duration: Manager, Power Trading or Division Manager, Power Sales & Operations
- Merchant Energy Products Day Ahead: Day Ahead Power Trader or Financial Trading Supervisor
- Merchant Energy Products Real Time: Day Ahead Power Trader or Financial Trading Supervisor or Real Time Power Trader or Physical Trading Supervisor

Transactions Two Weeks or Less in Duration - Related Policy

- Includes physical bilateral transactions up to two weeks and Day Ahead and Real Time market bids and offers.
- Market bids and offers are subject to minimum sell and maximum buy prices determined using short term water conditions and forecasted energy supply requirements.