POWER POOL OF ALBERTA

MSA REPORT

2002 Year in Review

10 February, 2003

MARKET SURVEILLANCE ADMINISTRATOR

1 EXECUTIVE SUMMARY

Section 9.91(1) of the *Electric Utilities Act* requires the Power Pool Council to prepare and deliver to the Minister an annual report containing a summary of the activities of the Power Pool Council related to the activities of the Market Surveillance Administrator during the previous year. While this document serves as that report, the Market Surveillance Administrator has also combined its comments on the activities of the market relating to electricity pricing, natural gas pricing, imports, exports and Alberta supply with its report on the issues and investigations that were dealt with by the MSA over 2002.

The markets for electricity in the province continued to evolve over 2002. The Balancing Pool had significant success in marketing the rights to a portion of the assets for which they became responsible following the original PPA Auction of 2000. The Balancing Pool managed to attract new players with the sale of the rights to three of the four Clover Bar units. They again found new players with the sale of strip contracts for the Sheerness assets. The result is that the Balancing Pool has met the challenge of increasing the number of players in the market and reducing their control of the generation actively offered into the Power Pool. The evidence of this latter point is provided by the realization that the Balancing Pool now falls within the parameters of the holding restrictions, which were initially applied to the PPA auction of 2000. The industry collectively worked on the problems of settlement to the point where they were successful in settling all of 2001 during 2002. There was the transition of the control of the System Settlement Code from the Department of Energy to the Power Pool Council. The Power Pool Council also successfully negotiated with ESBI to transfer control of the Transmission Administrator function to the Power Pool Council.

All of the above events provide strong evidence of how all market participants and stakeholders have worked extremely well together to create an increasingly competitive and efficient market. The MSA is of the view that the market did operate well in 2002 and the analysis of prices, supply, demand, imports, and exports contained in the body of this annual report, supports that view.

The price for electricity had its ups and downs over the course of 2002 as one would expect from an openly competitive market. Prices started the year at relatively low levels and showed some modest increases through the year. The price volatility of the last two months of the year resulted in the year to date average price increasing to $43.93/MWh at year end from $38.70/MWh at the end of October. It should be noted that not all volatility through the year was in the higher price direction as there was a period in late June where the system marginal price fell to $0.01/MWh for a number of hours. A significant difference between 2002 and 2001 was that California did not have as big an influence over raising both natural gas and electricity prices in the Pacific Northwest region; the area into which British Colombia can move its energy if it feels the market prices are more favorable than in the Alberta market. Notwithstanding the market volatility through 2002, market conditions were challenging for participants,

particularly for gas generators. A new combined cycle generator would have produced a return in the range of only about 6-8% over cost of capital, based on our estimates.

This past year saw the peak demand for electricity rise from 8334 MW in 2001 to 8570 MW in 2002. Over the same period, an additional 255 MW of new capacity was added to the system. During 2002, the MSA tracked all PPA unit outages and derates and while the pattern of forced outages vs. planned outages changed in 2002 relative to 2001, the total outage level did not vary significantly as it was 9.3% in 2002 compared to 9.8% in 2001. In its review of these outages and derates, the MSA had no cause to believe that any one player used their maintenance to specifically game the market.

With respect to the need to investigate questionable behaviour, the MSA is pleased to report that by working closely with participants, the MSA managed to assist most stakeholders in finding solutions to their issues or concerns. In fact the MSA conducted only one formal investigation in 2002 as compared with three investigations in 2001. This investigation in 2002 involved reviewing the question of whether it was within the mandate of the Balancing Pool to import energy. The investigation concluded that activity on the interchange was indeed within the mandate of the Balancing Pool as a market participant.

The MSA has also improved the industry's access to the MSA by holding successful stakeholder meetings in February and in November.

The MSA, with the assistance of the Operations group of the Power Pool, instituted the guidelines for the Use of the Locking Restatement midway through 2002. This was a direct result of a decision of the Power Pool Council released in September of 2001. The MSA has monitored the participants' behaviour related to these guidelines during the last half of 2002 and is pleased to report that there has been a change in participant behaviour in line with the guidelines.

The MSA has worked closely with the government in drafting the new *Electric Utilities Act* and looks forward to the challenge of following through with implementation of the new structure in 2003. The MSA continues to receive excellent support from the members of the Power Pool Council in fulfilling its mandate and looks to build on these relationships as the two groups move into their new forms of governance.

This report reviews the wholesale electricity market in Section 2, the retail market in Section 3, decisions of Power Pool Council in Section 4, market issues in Section 5, and other MSA activities in Section 6.

2 REVIEW OF THE WHOLESALE ELECTRICITY MARKET

i) **Electricity Prices**. Prices fluctuate hour to hour and day to day for various reasons including the shape of the market offer curve, and the availability of supply. While Alberta has experienced price spikes in 2002, they have generally been limited in duration and have not been shown to be a result of provable anti-competitive behaviour. As well, it should be noted that Alberta has also experienced extremely low prices in 2002 ($0.01/MWh). In general, the MSA is not concerned about high prices or low prices. The MSA is looking to ensure that market prices are the result of a fair, efficient, and openly competitive market.

On a monthly average basis, Pool prices in 2002 moved in a band of $20 - $70. Prices trended upward since the middle of the year partially reflecting an increase in gas prices from near $2/GJ in July to near $6/GJ at the end of the year. Volatility of Pool prices in 2002 moved higher relative to 2001 with a sharp increase in the summer months. Higher volatility in 2002 can be partially attributed to a change in the nature of participant offers. As shown by the example in Figure 1, the shape of the offer curve began to exhibit a more pronounced reverse L-shape as a result of greater frequency of offering capacity in at $0.00 among participants (acting as a price taker). The outcome of more numerous zero offers was a decrease in the "shoulder" of the supply curve, resulting in prices that were predominantly low but could climb very high, very quickly in high demand periods. The MSA has undertaken a review of this zero offer behaviour, and the results of this review will be made public in Q1/03. Figure 2 shows the average monthly Pool price and the coefficient of variation. The coefficient of variation (CV) measures how widely Pool prices were distributed relative to their average value. A high CV reflects wide swings in Pool price relative to the average. As can be seen in both Table 1 and Figure 2, volatility in 2002 peaked in the month of June. June volatility was a result of the zero offer behaviour discussed previously, together with a number of peaking gas generators being offline and an inability for importers to secure transmission through BC to fully utilize available tie line capacity into Alberta. The increase in volatility seen in November and December was largely attributed to low availability of several coal units due to scheduled maintenance, as well as Wabamun 3 being taken out of commercial service. The price effect of this reduced availability was compounded by lower import levels in peak periods. Looking at the price duration curves in Figure 3, prices in 2002 were lower than prices through 2001 more than 95% of the time although price spikes above $250/MWh were more frequent, again due to the reverse L-shaped offer curve resulting from the zero offer behaviour discussed above.

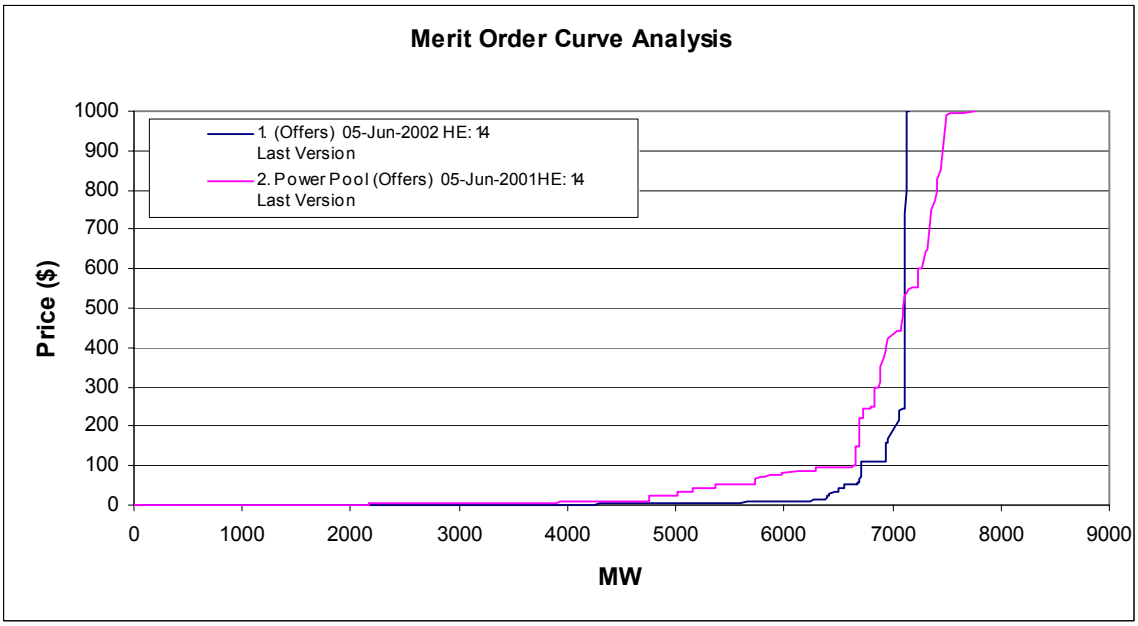


Figure 1, Offer Curves

	Average Price	Min Price	Max Price	Std Dev[1]	Coeff. Variation[2]
Jan	28.43	7.32	230.74	16.34	57%
Feb	22.37	5.83	97.81	13.60	61%
Mar	55.14	9.11	786.00	56.34	102%
Apr	45.03	6.46	420.77	33.47	74%
May	40.44	8.16	880.24	64.99	161%
Jun	46.23	0.01	999.00	111.12	240%
Jul	26.41	1.93	768.92	41.48	157%
Aug	32.03	8.30	998.01	52.58	164%
Sep	45.70	9.96	703.97	42.16	92%
Oct	44.33	9.55	665.21	39.23	88%
Nov	69.07	10.11	943.69	82.47	119%
Dec	70.88	9.82	886.10	108.00	152%
2002	43.93	0.01	999.00	64.77	147%
2001	71.29	5.82	879.20	56.77	80%

1 - Standard Deviation of hourly pool prices for the period

2 - Coefficient of Variation for the period (standard deviation/mean)

Table 1, Pool Price Statistics 2002

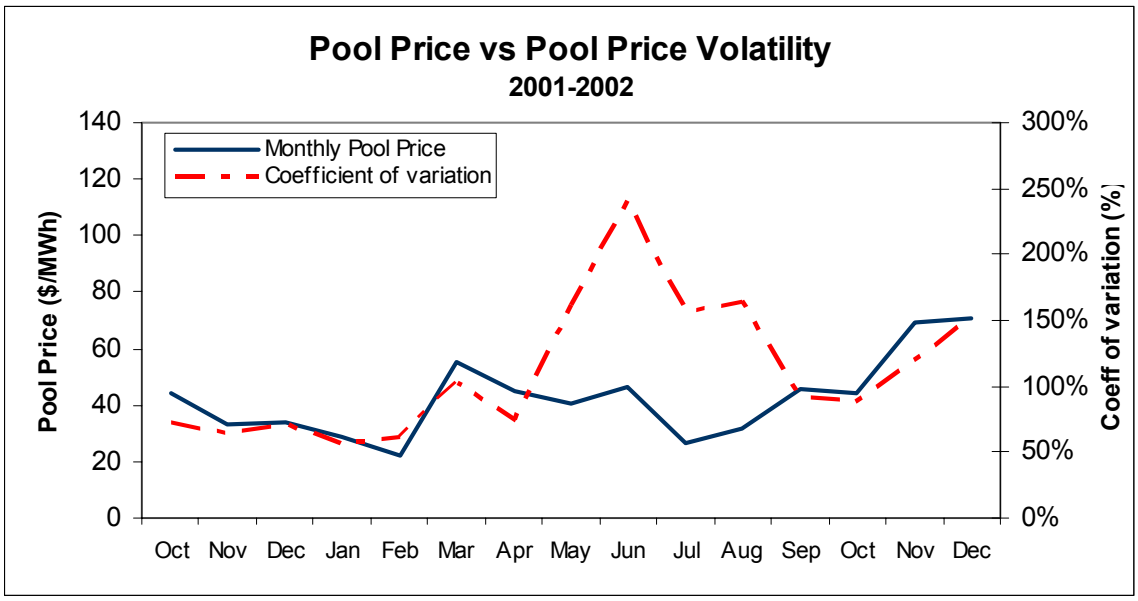


Figure 2, Pool Price vs. Pool Price Volatility

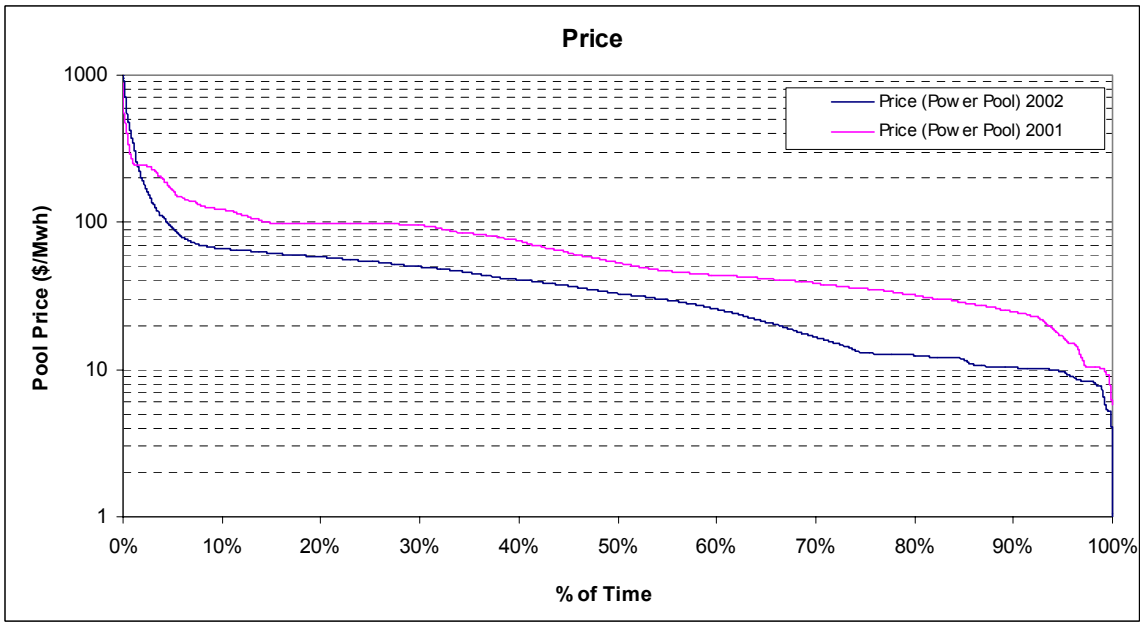


Figure 3, Pool Price Duration Curves by Year

ii) **Natural Gas Prices**. The marginal (price-setting) generating unit in Alberta, approximately half of the time is gas-fuelled and therefore, the price of gas has a significant influence on pool prices. As well, nearly all of the new generation capacity commissioned in Alberta in the last two years has been gas fired. In 2002, gas fuelled generating units set Pool price 51% of the time at a weighted average system marginal price (SMP) of $60.33 as compared to 56% of the time in the 2001 at a weighted average SMP of $81.62. The fact that gas fuelled units set price less of the time in 2002 relative to 2001 even though more gas capacity was added to the system, is attributed to the lower average Pool prices in 2002 giving gas units, particularly Clover Bar, less opportunity to run profitably, since as previously noted, the weighted average SMP set by gas units in 2002 was $21.29/MWh less than the year before. Figure 4 compares the monthly gas price in Alberta with the average Pool price. On a monthly average basis, the correlation of the two commodities is evident. The correlation coefficient is 0.82 for the 15 month period shown. Gas prices weakened in Q2/02 and into Q3/02 but recovered strongly over the remainder of the year into the high $5/GJ range. Gas storage levels toward the end of 2002 declined at a faster rate than average and weather related demand has also served to underpin strengthening in the gas market.

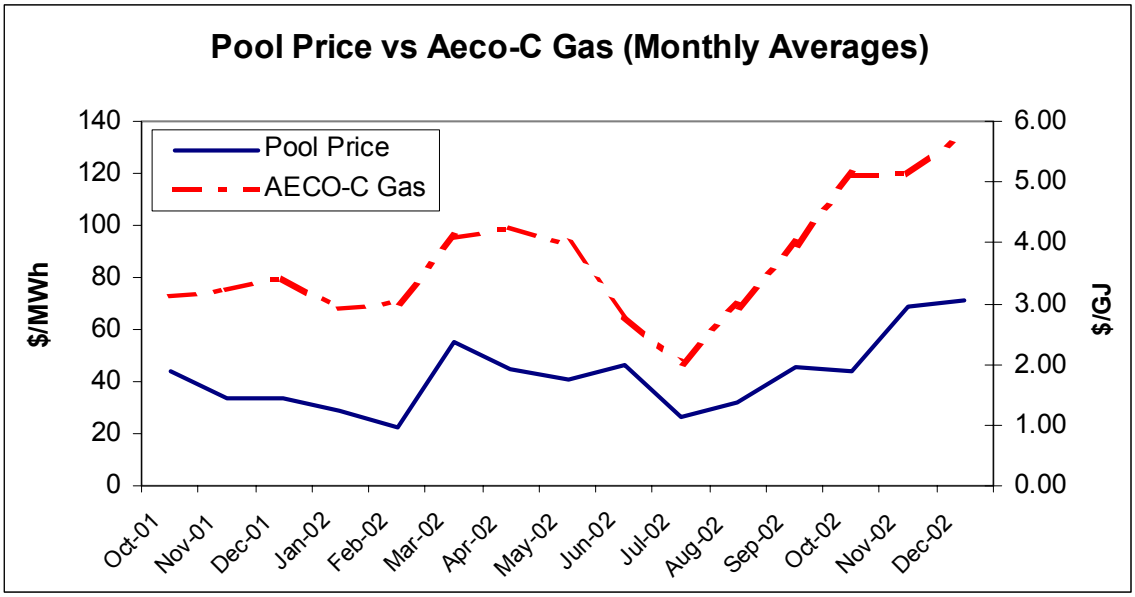


Figure 4, Pool Price vs. AECO-C Price

iii) Price Setters in 2002. Figure 5 shows the top 5 participants who have set Pool price throughout 2002 together with the average price at which they set system marginal price (SMP). Other than generator "A", which is the Balancing Pool, no one generator had a disproportionate market share in terms of setting the price. Although generator "A" set price most often, it set price at modest levels relative to the other four most active price setters. Figure 6 shows price setters by fuel type for 2002. In on-peak hours, gas fuelled generation set the price 51% of the time at a weighted average marginal price of $60.33. In off-peak hours, coal fired generation set price 70% of the time at a weighted average marginal price of $15.43. In comparing the weighted average marginal prices in figures 5 and 6, it is important to note that values in Figure 5 are calculated by generator and thus comprise multiple fuel types. With the Balancing Pool gradually reducing its control of assets through the MAP auctions, the distribution of price setters will likely be different next year. In fact, the Balancing Pool set price 16% of the time in Q4/02 vs. 34 % of the time in Q1/02.

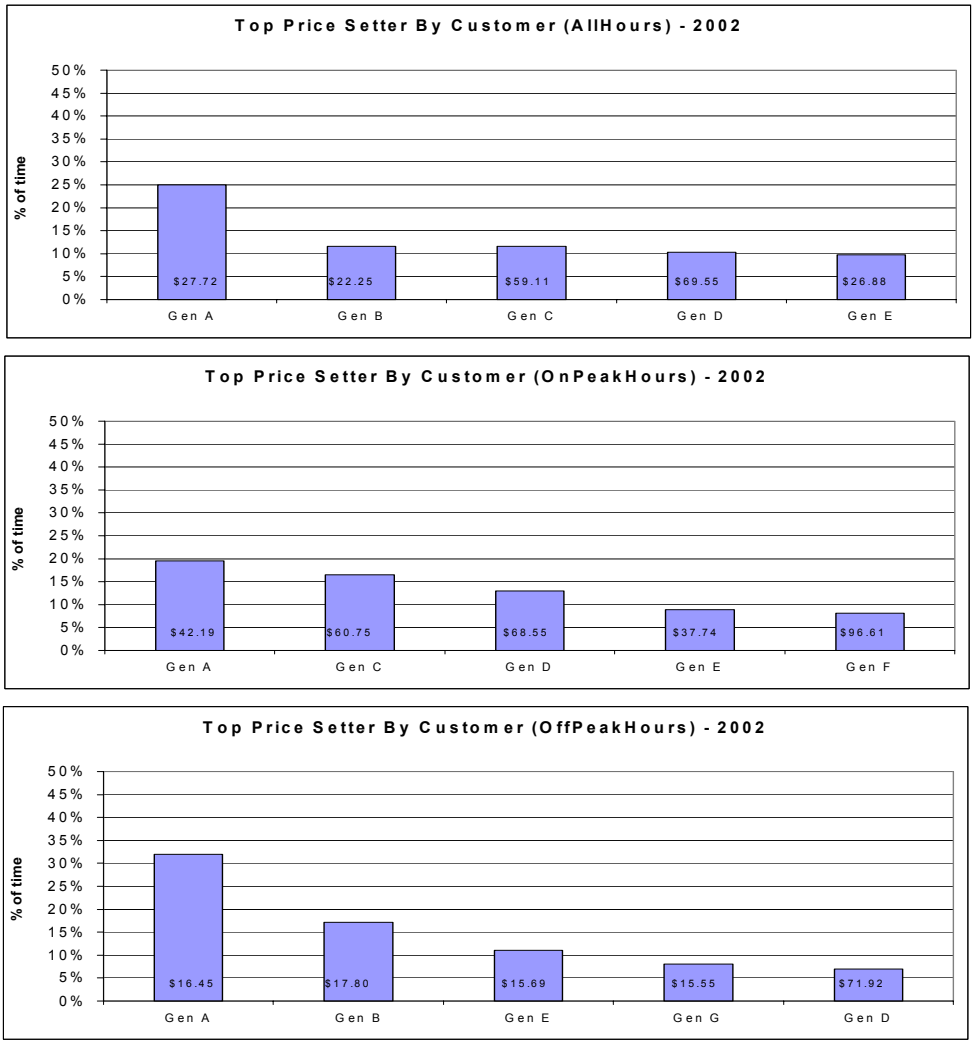
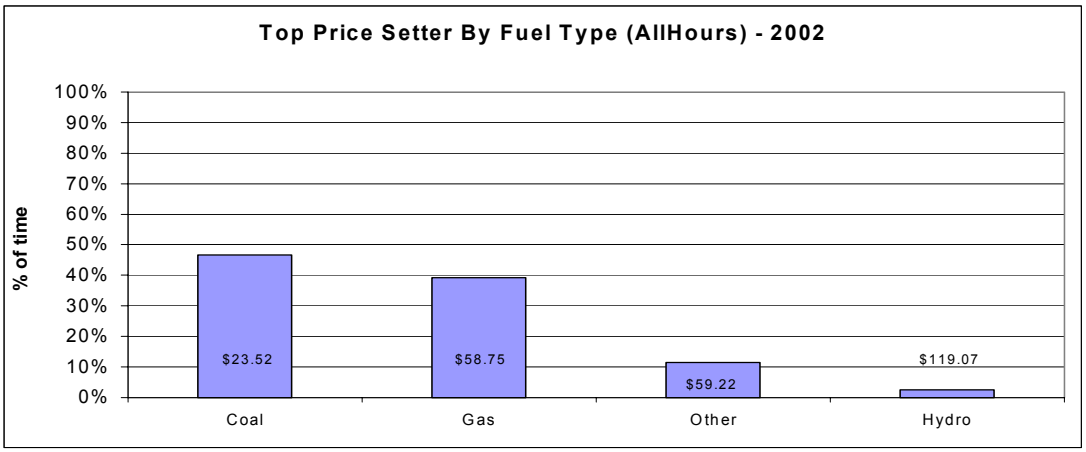
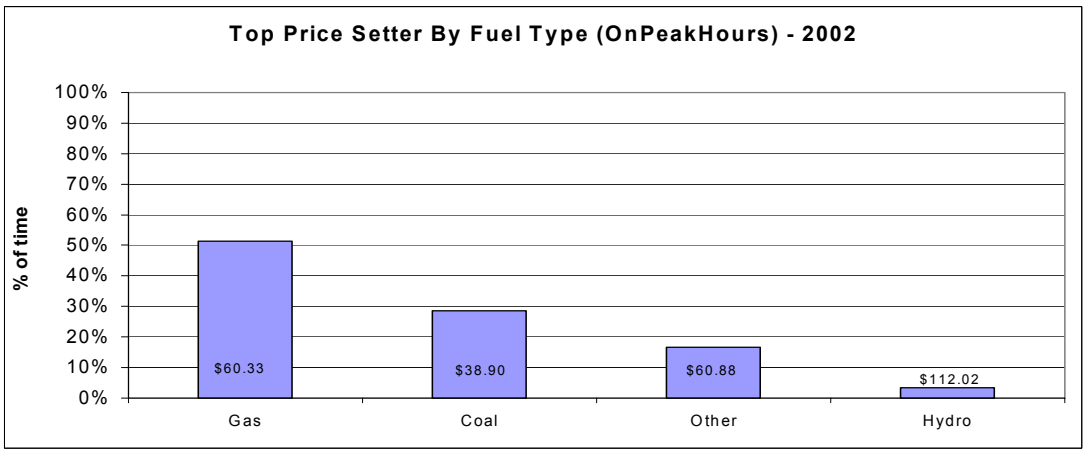


Figure 5, Price Setters by Customer, 2002





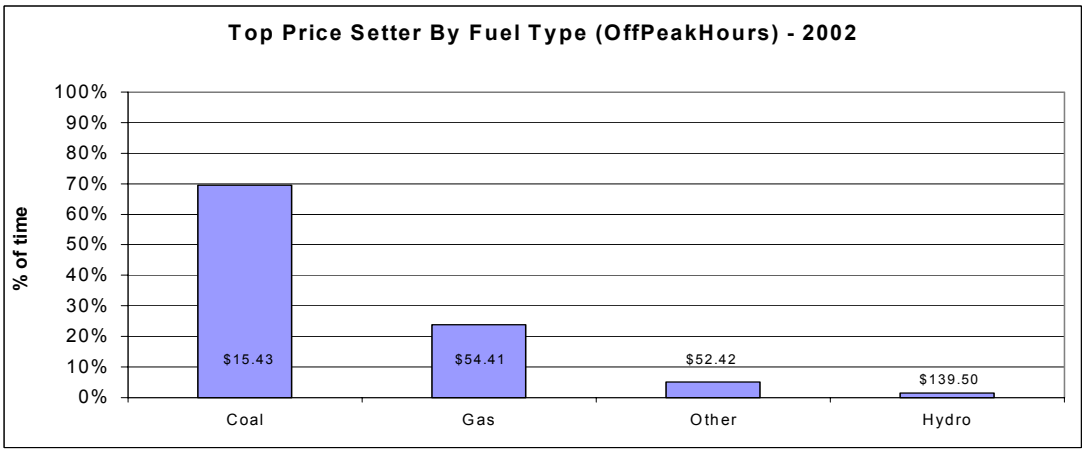


Figure 6, Price Setters by Fuel Type, 2002

iv) **New Power Pool Rules**. There were no major changes to Pool Rules in 2002.

v) **New Supply and Load Growth.** 2002 was a much more modest year for capacity additions relative to 2001. A total of 255 MW of new generation was commissioned in 2002, representing an increase of about 2.5%. This included the following significant projects

- Mahkeses – Imperial Oil – Gas (180 MW)
- Bear Creek – Weyerhaeuser – Gas (50 MW)
- Cavalier – Encana – Gas (25 MW)

Although this new capacity will enhance the supply side of the Alberta market, the loss of Wabamun 3 from the system in late November has partially counteracted these additions. There have also been concerns raised late in 2002 that ongoing drought conditions in Alberta threaten a prolonged forced outage at Atco's Battle River plant by the end of Q1/03. Battle River accounts for 660 MW of coal fired generation capacity, and its outage would place upward pressure on Pool prices.

Average hourly demand by month in 2002 ranged from 6621 MWh in May to 7351 MWh in December. Peak demand in 2002 was 8570 MW, an increase of 3% over the previous year, thus, the increase in supply approximately matched the increase in peak demand in 2002. Total installed capacity as of the year end, excluding Wabamun 3, was 10,813 MW which is 26% above 2002 peak demand. Excluding Battle River, total installed capacity would still have been approximately 18% above 2002 peak demand at year end.

vi) **Net Revenue.** Net revenue can be an indicator of overall market performance since it approximates the contribution to a generator's capital costs and is thus an indicator of relative profitability of an investment in generation as well as a measure of the incentive to build new generation to serve the Alberta market. Net revenue is determined as the sum of revenue after variable operating and maintenance costs and fuel costs have been covered for all hours in which the market price exceeded variable cost, over a defined period. As such, it is a best case measure in that it does not take forced outages or operating constraints into account. For example, ramp times to bring generation up to full production may mean that some profitable hours are missed and the unit is left to run during non-profitable hours. As a practical matter, net revenue would accrue from both the energy market and the Ancillary Services market (for those generators who participate in the ancillary market). For simplicity, the graph shown only reflects energy market revenues.

Figure 7 shows net revenue curves for 2002 and for 2001. As expected, with lower overall prices in 2002 vs. 2001 (as shown by the price duration curve in Figure 3), net revenues were down substantially in 2002 relative to a year ago. In 2002 a low cost producer with a marginal cost of $10/MWh could have generated net revenues of about $300,000 per installed net MW of capacity compared to about $530,000 in 2001. A higher cost producer with a marginal cost of $50/MWh could have produced net revenues of $100,000 / MW vs. about $250,000 last year. Again, these are upper end values which would be then available to cover fixed O&M expenses, depreciation, and a return on investment.

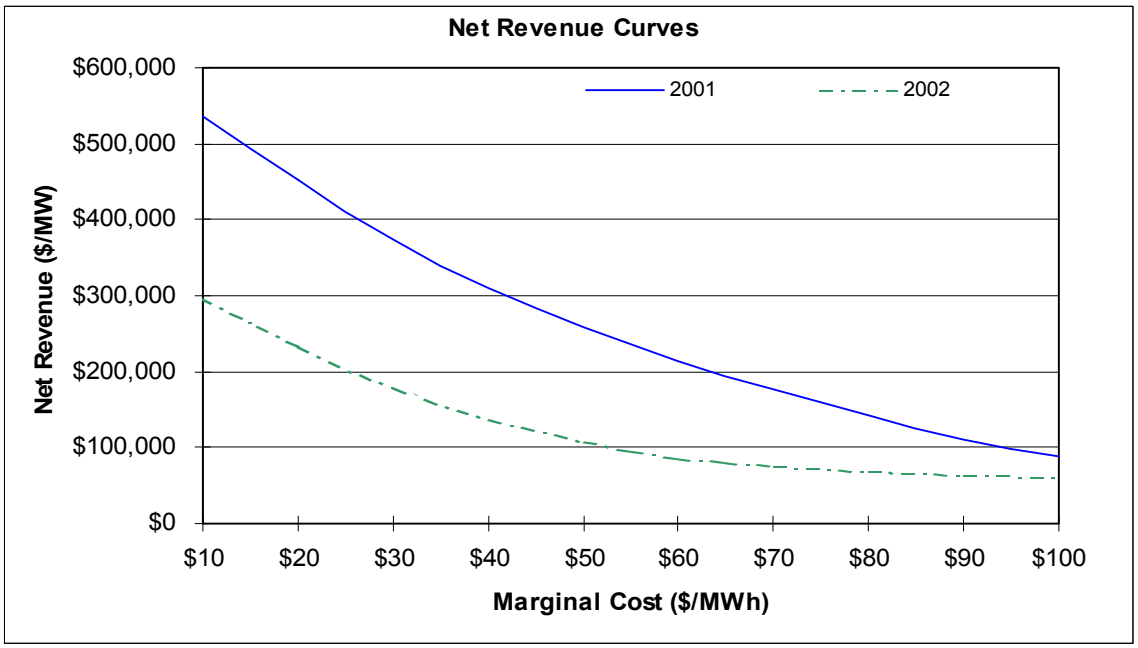


Figure 7, Net Revenue Curves for 2002 and 2001

Figure 7 illustrates net revenues for producers with a variable cost that does not change from day to day. For plants operating on gas, it is more appropriate to examine net revenues assuming the variable cost of the plant floats with the daily spot price of natural gas. Figure 8 depicts the net revenues of gas fuelled plants at different thermal efficiencies (heat rates) in 2001 and 2002. The figure shows that in 2002, a new gas generator with a thermal efficiency of 6 GJ/MWh could have generated net revenues of about $190,000 per installed MW of capacity while an older unit in the system with a thermal efficiency of 13 GJ/MWh could have generated net revenues of about $60,000/MW.

In the example of a new entrant, a combined cycle plant based on LM6000 combustion turbine technology would have a capital cost of about $1 million per MW. With an assumed efficiency of 7 GJ/MWh and accounting for variable operating and maintenance (O&M) costs, the plant would have been able to garner maximum net revenues of about

$153,000/MW in 2002. Deducting fixed O & M costs and allowing for the fact that the plant could not capture all profitable hours suggests a return of $127,000 for each installed MW. At $1 million per MW, assuming a 25 year asset life and a 6% cost of capital, implies a return in the range of 8% over cost of capital.

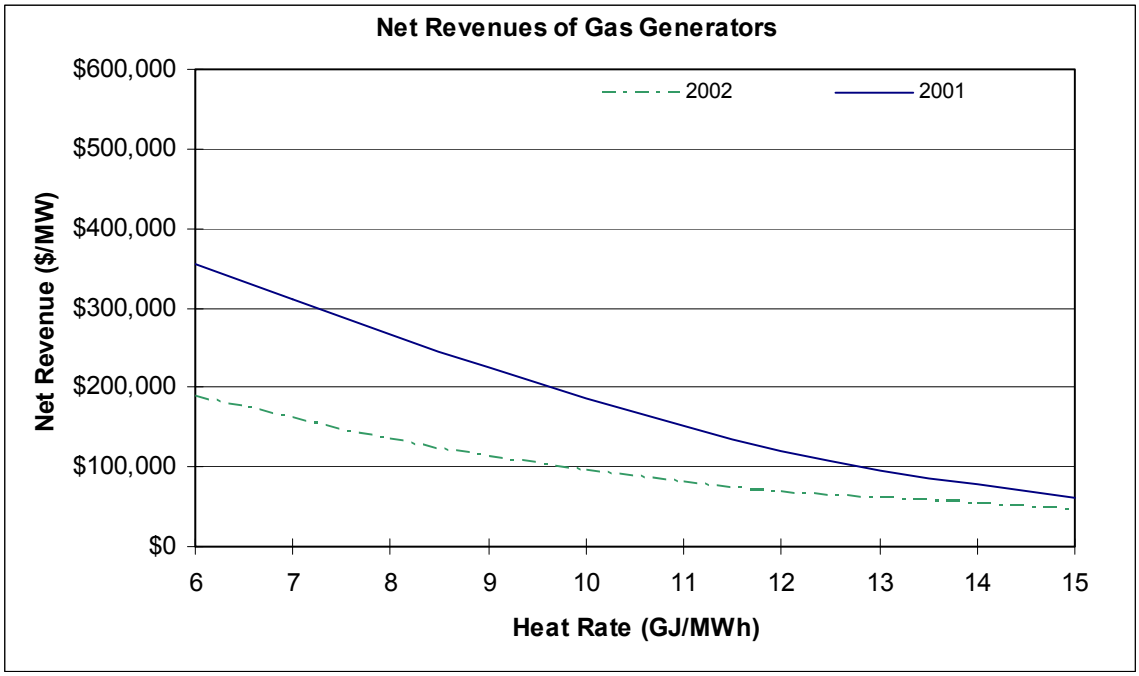


Figure 8, Annual Net Revenues of Gas Generators

vii) Lerner Index. On an ongoing basis, the MSA tests and if appropriate, adopts additional market metrics to better understand and describe the functioning of Alberta's wholesale market. One additional metric that was adopted in 2002 is the Lerner Index. In its most basic form, the Lerner Index is a price versus marginal cost measure which is used to evaluate the competitiveness of a given market. The value of the Lerner Index is necessarily bounded between 0 and 1, unless the Marginal Cost exceeds the System Marginal Price (SMP). A value close to zero would indicate that the market is perfectly competitive, whereas a value closer to 1 would indicate a market being dominated by a firm, or group of firms, acting as a profit-maximizing monopolist. The functional form of the Lerner Index is as follows;

$$\frac{\text{System Marginal Price} - \text{Marginal Cost}}{\text{System Marginal Price}}$$

The SMP represents each intra-hour price that is set by the interaction between system demand and the supply function (Merit Order), and the marginal cost is the value or cost assigned to the next MW generated by each unit that sets the SMP. This Marginal Cost is a function of the unit's heat rate, variable input cost, output, transmission tariffs, and other incremental costs where applicable. After a Lerner value for each SMP instance has been calculated it can then be time weighted to yield daily, monthly and quarterly results. The basic form of the Lerner Index alone does not provide a detailed story about the competitiveness of the Alberta market, however it can be used as a relative measure to determine how the competitiveness of the Alberta electricity market has changed over time, i.e. comparing the current Lerner with last period's and drawing conclusions from any change. Figure 9 suggests that the Alberta market generally grew more competitive in 2002 relative to the later part of 2001. A general leveling off can be seen in the Lerner index over the last five months.

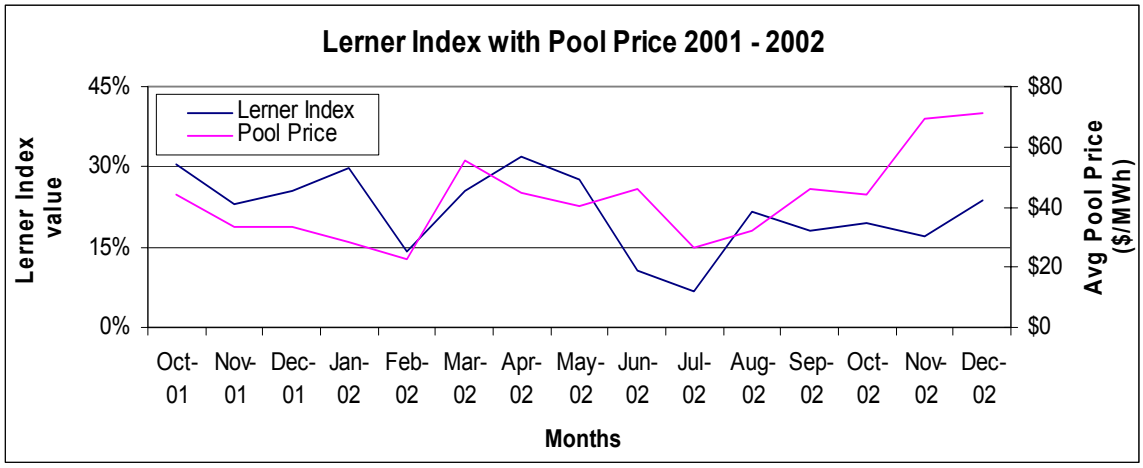


Figure 9, Lerner Index with Pool Price

viii) **Implied Market Heat Rate.** The implied market heat rate is a slightly different way of looking at spark spreads although both attempt to demonstrate the profitability of gas generators. The implied market heat rate is simply the break-even heat rate that is defined by the market price of electricity and the spot price of natural gas. Figure 10 shows the daily implied market heat rate for 2002 on both an on-peak basis and an off-peak basis. The pronounced spikes seen in the late June – early July period are primarily attributed to weakening of intra-Alberta gas prices into the $1.50 – 2.00/GJ range, meaning that although Pool price was not exceedingly high in this period, gas prices fell to levels that created very favorable economic conditions for gas generators. Figure 10 demonstrates that off-peak hours would generally not support gas-based generation. While the average on-peak implied market heat rate in 2002 was about 15 GJ/MWh, the off-peak value was only 6 GJ/MWh. In the context of a gas unit such as Clover Bar with a heat rate of 12-15 GJ/MWh, the unit would have lost money, on average in off-peak periods in 2002 and on average would have made only a modest return in on-peak periods.

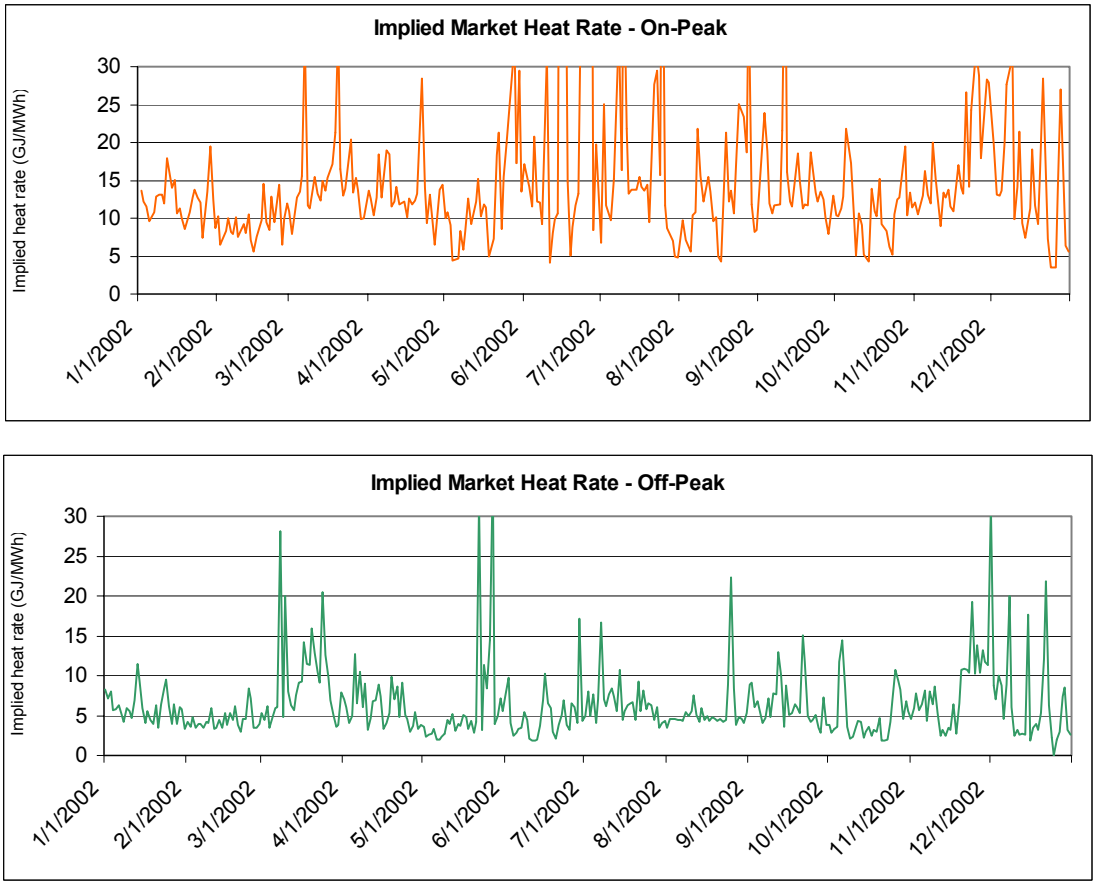


Figure 10, Implied Market Heat Rate (2002)

ix) **Imports, Exports and Prices in Other Electricity Markets.** Neighbouring markets have some impact on price behaviour in the Alberta market within the physical and operational constraints of the transmission interconnections.

- Figure 11 shows on-peak Pool prices together with those in neighbouring electricity markets over 2002. Relative to other western markets, on-peak prices in Alberta were somewhat higher for the majority of 2002. Summer prices in mid-C were especially low due to high runoff at the hydro stations.

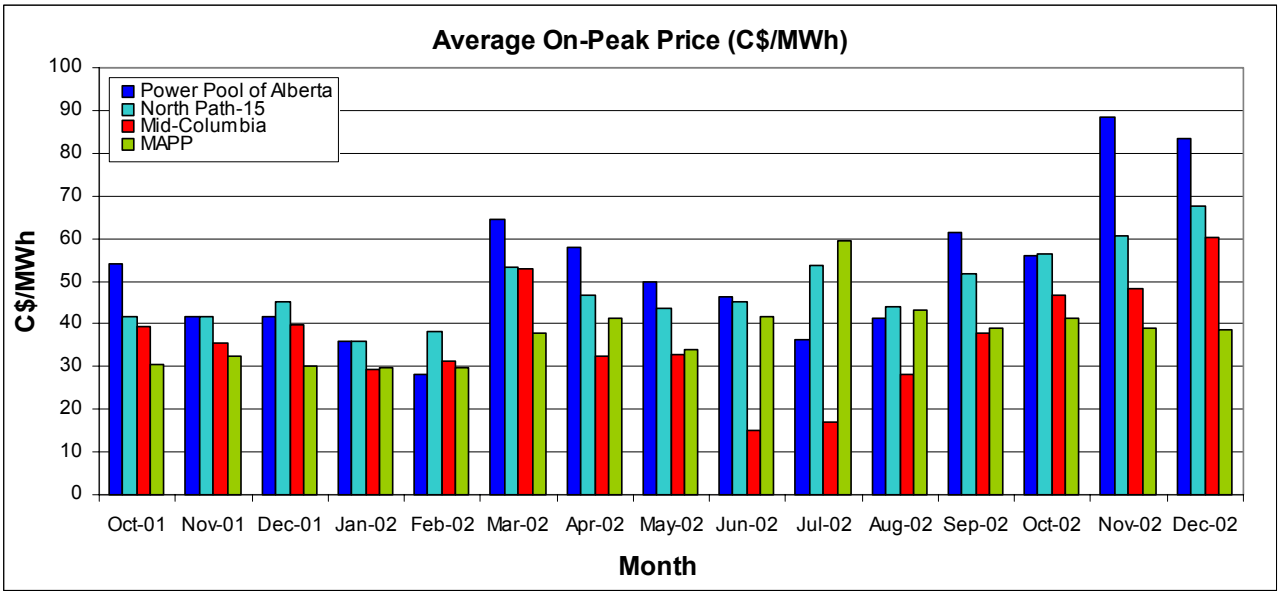
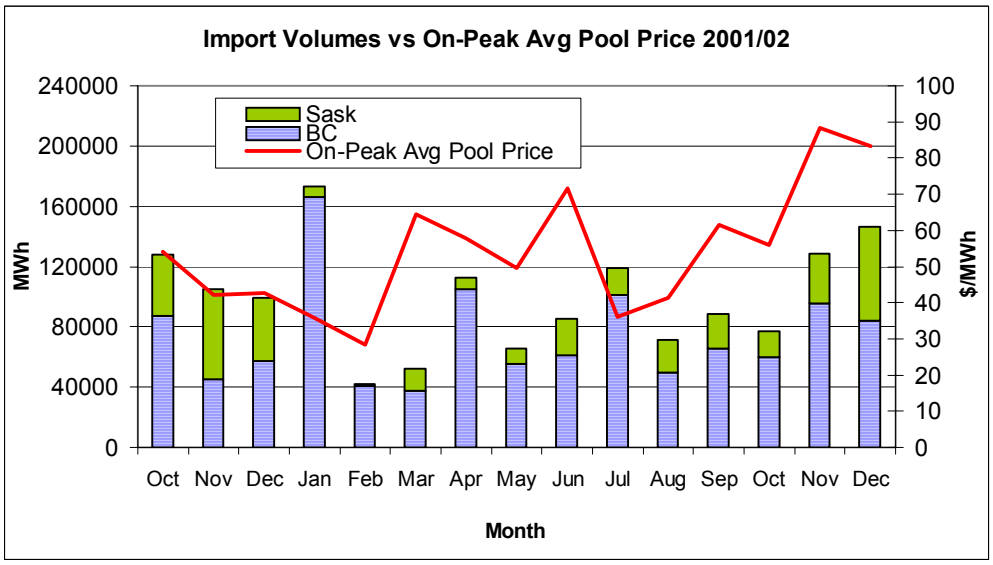


Figure 11, Average On-Peak Prices

- Figure 12 shows the volumes of imports and the prices paid. Total import volumes have trended higher since mid-Q1/02 due in part to increased volatility in market prices in Alberta. Imports from British Columbia made up the majority of total imports through the year in contrast to 2001 when imports from Saskatchewan made up the bulk of import volumes. In terms of the prices paid for imports, both those from Saskatchewan and B.C. were higher than on-peak average Pool price through 2002, indicating that although importers are price takers, they have been opportunistic in selling into the Alberta market during high priced periods. This was particularly the case in Q4/02 during which the price paid for imports from B.C. trended up relative to on-peak average Pool price. In 2002, Alberta was a net importer relative to BC in 8 months of 2002 and a net importer 9 months of the year relative to Saskatchewan.



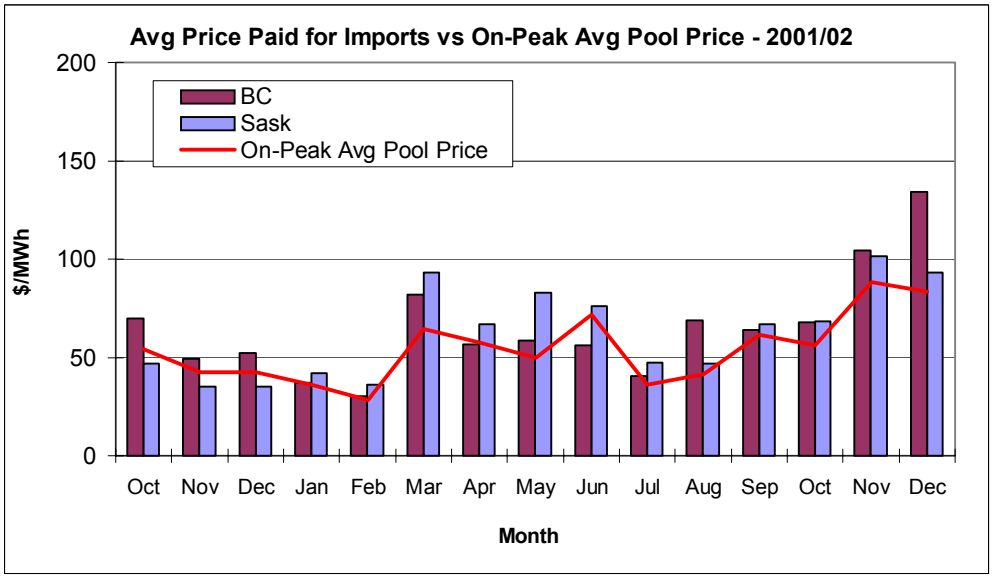
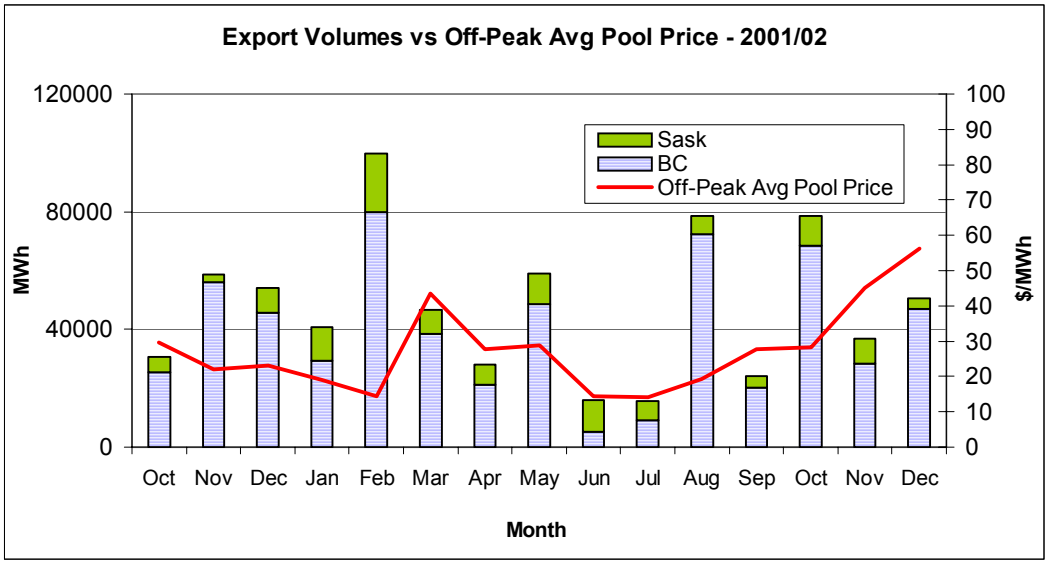


Figure 12, Imports 2001 – 2002

- Figure 13 shows the amounts of exports and the prices paid. Total export volumes varied widely from month to month as compared to 2001 when export volumes were higher and more consistent due in large measure to the substantial volumes lured south by high prices in the California market. On average, the prices paid for exports were at or marginally below off-peak average Pool price, other than August exports to Saskatchewan. This trend is more pronounced in Q4/02 as Pool prices increased. These lower than average export prices indicate that exporters were more active in off-peak hours where prices tend to be lower than overall average prices.



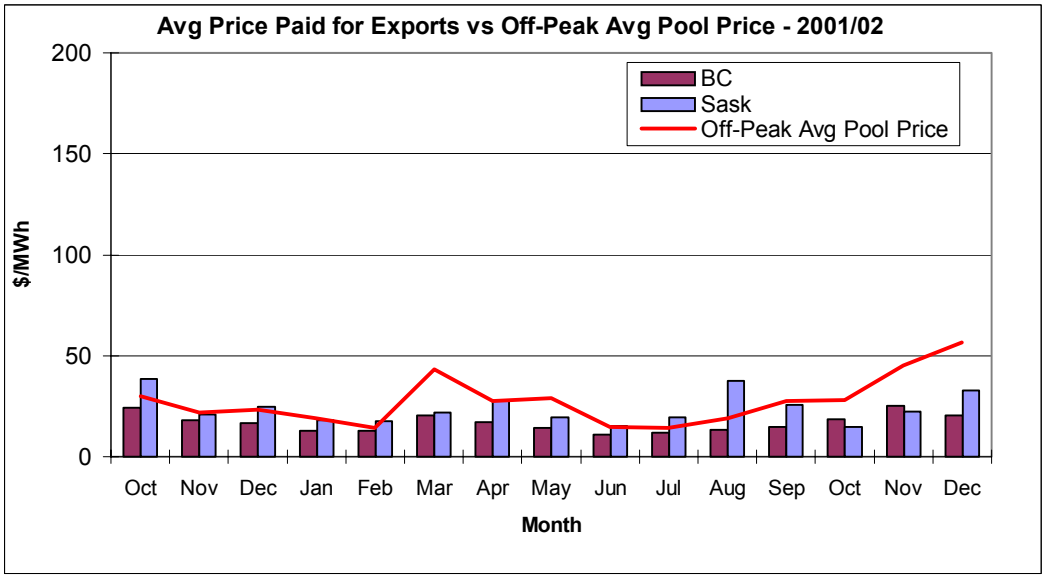


Figure 13, Exports 2001 – 2002

x) **MAP II**. A significant change in the Alberta wholesale market in 2002 was the success to date, of the second phase of the market achievement plan (MAP II) by the Balancing Pool. In two stages, offer rights for 1,227 MW of generation capacity have been moved out from the Balancing Pool and into the hands of other market participants for the next three years. This total is comprised of 471 MW in Clover Bar unit contracts and 756 MW in Sheerness strip contracts. Contracts were sold to six different market participants, three of which are new to the Alberta market. A third stage of the MAP II process is now underway in which strip contracts associated with the Genesee PPA are expected to be sold by early Q2/03, moving the offer rights of another 762 MW into the hands of market

participants. Although the Balancing Pool is not subject to the holding restrictions of the original PPA auction, MAP II sales to date would bring the Balancing Pool to 13% of the original volume of PPA capacity. The original holding restriction which applied to all other PPA buyers was 20%. Therefore, now all PPA buyers including the Balancing Pool, fall within this holding restriction.

xi) **Ancillary Services Market**. Figures 14, 15, and 16 show the delivered price of active ancillary service products traded via the Alberta Watt Exchange (Watt-Ex) through 2002. Approximately 90% of ancillary services procurement in the Alberta market is done through Watt-Ex with the balance procured by the Transmission Administrator on an over the counter (OTC) basis. Active reserves are traded at a differential to Pool price which explains the lockstep correlation between each product and pool price. As can be seen in figures 14-16, the differentials between reserve products are also consistently tight. The most notable feature is the market price of supplemental reserve service which has remained at zero the majority of the time since mid-Q1/02. This outcome can be attributed to the hydro PPA structure, which was written prior to the advent of a competitive Ancillary Services market. TransAlta Utilities, the owner and holder of dispatch rights to the regulated hydro units, has an incentive to provide supplemental reserve service in order to fulfill its ancillary services obligation under the PPA.

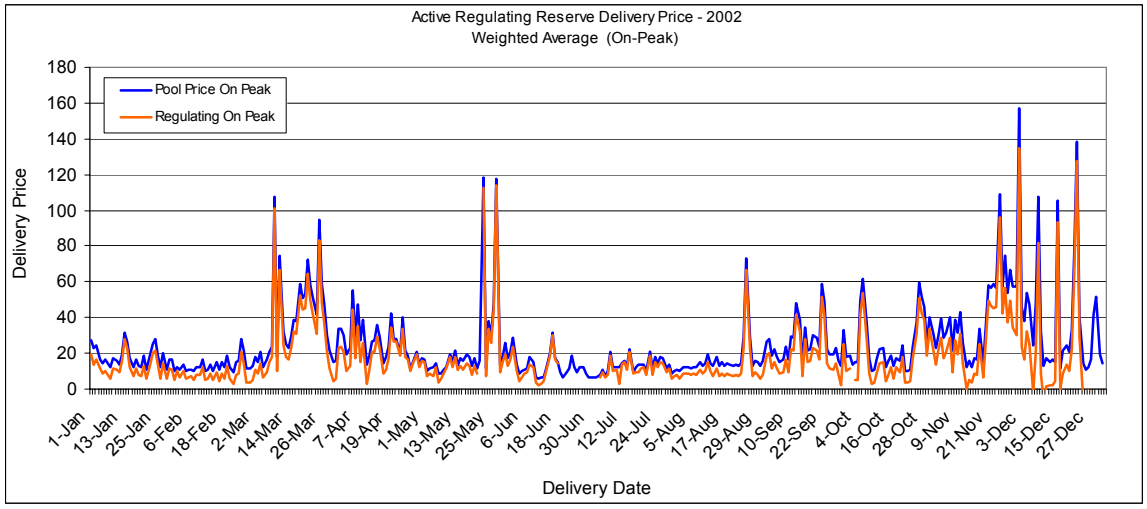


Figure 14, Regulating Reserve Market Prices - 2002

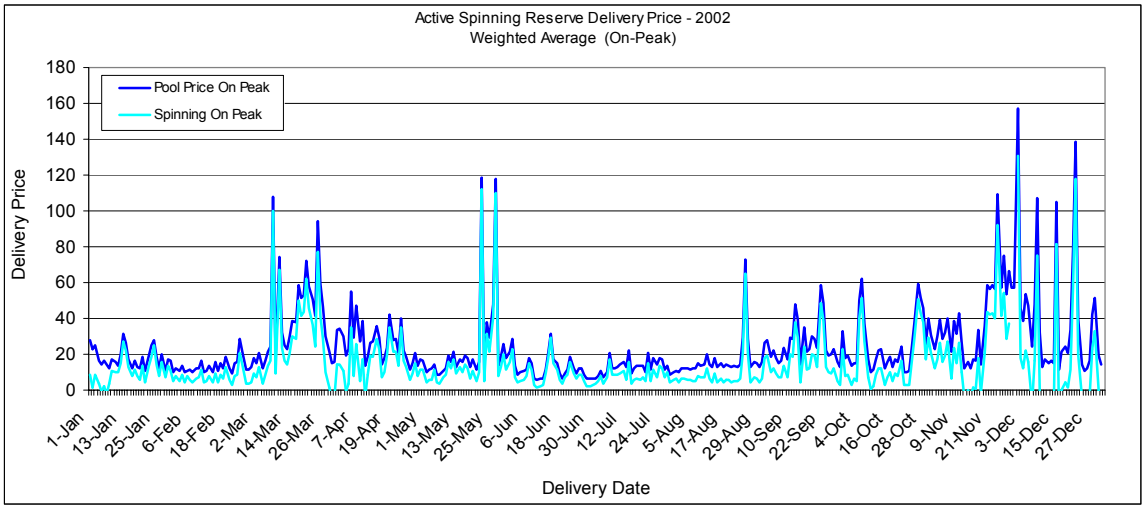


Figure 15, Spinning Reserve Market Prices - 2002

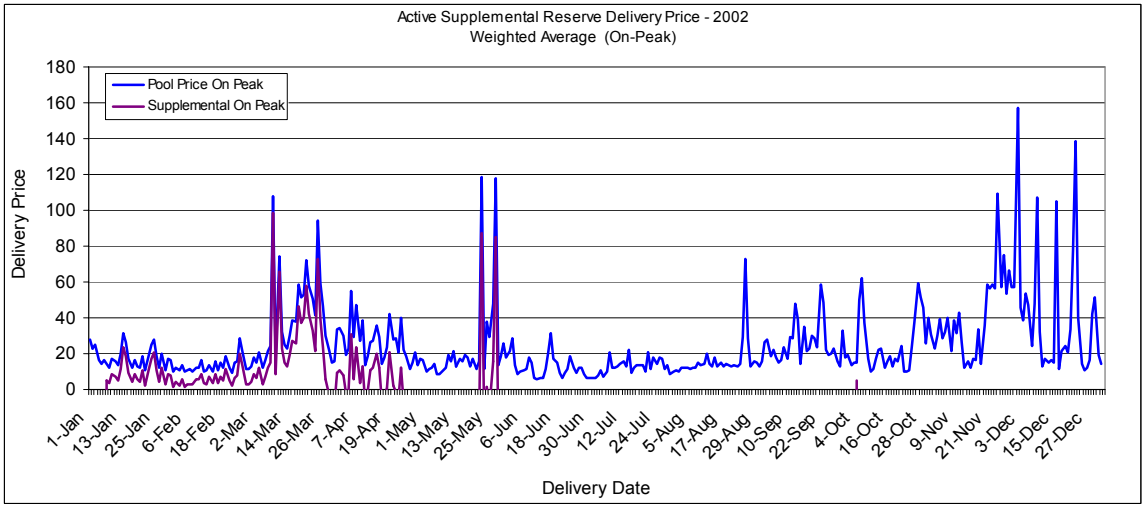


Figure 16, Supplemental Reserve Market Prices - 2002

xii) Outages and Derates. By regulation, the MSA is required to monitor the outages and derates of the previously regulated generating units that are now operated under the terms and conditions of the Power Purchase Arrangements (PPAs). In addition to its real-time monitoring, the MSA has developed a number of data filters which indicate when the timing or duration of outages and derates deviates significantly from a unit's historical performance. When the amount of outage exceeds a unit-specific threshold, a flag is raised and the MSA seeks to understand more about the causes leading to the situation.

Historically, levels of outages and derates, both planned and unplanned, have shown a great deal of variability on an annual basis. For instance, between 1995 and 1999, system wide average annual outage rates, including planned outages, ranged between 4.6% (1998) and 23.4% (1995). The amount of outage can vary from one time period to the next because planned outages are scheduled on a multi-year basis. This, in turn, impacts upon unplanned and forced maintenance. Tables 2 and 3 below show the amount of outage, including and excluding planned outages by quarter for 2002.

TransAlta Units

TransAlta's thermal PPA units experienced an increasing trend of unplanned (forced and maintenance) outages during 2002. Unplanned outages and derates increased from a low of 7% in Q1 to a high of 17% in Q4. For the year, TransAlta averaged 11.2% outage (excluding planned outages), compared to 8.1% in 2001. Lower levels of planned outage offset the higher rate of unplanned outage. TransAlta scheduled approximately 60% less planned outage in 2002 compared to 2001. However, forced and maintenance outages were higher such that TransAlta's total outage rate was not significantly different in 2002 than in 2001. Total outages in 2001 were 13.6% compared with 13.4% in 2002.

Epcor Units

Epcor's PPA units experienced low outage rates and, thus, high levels of overall availability. Excluding planned outages, Epcor's units were unavailable only 1.1% of the time during 2002 (2.2% when planned outages are included). Epcor's outage figures are low for a number of reasons. First, because of market conditions the PPA purchasers did not frequently offer the higher cost gas units at Clover Bar and Rossdale into the market, reducing the need for planned maintenance and the probability of unplanned outages. Second, Epcor's coal units (Genesee 1 and 2) are the newest in the Alberta coal-fired fleet, having been commissioned in 1989 and 1994. In general, newer units require less maintenance than older generating stations such as TransAlta's Wabamun units, commissioned in 1956 or the Sundance generating station, commissioned in the 1970's.

Atco Units

Excluding planned outages, Atco's PPA unit outage averaged 4.5% during 2002. This figure increases to 8.0% when planned outages are included. In 2002, Atco recorded an increase in lost MWh due to planned outages when compared to 2001. Atco's planned outage was approximately 34% higher than the previous year. Looking forward into 2003, forced outage may become an issue at Atco's Battle River generating station due to low water levels in the Battle River. The Battle River station represents

670MW of baseload coal generation, which was commissioned in 3 stages in 1969 (unit 3), 1975 (unit 4) and 1981 (unit 5).

Overall operating hours lost due to unit maintenance were well within the historical range of experience. In total, PPA unit outage (both planned and unplanned) averaged 9.3% in 2002, compared to 9.8% in 2001. For the pre-restructured market from 1995 to 1999, system wide PPA outage was 16.5%. There has been some concern, especially in Q4/02, that as many as 5 base load plants experienced forced and maintenance outages simultaneously. The MSA has endeavored to understand this situation and has found no untoward behavior. However, concern persists that less planned maintenance was scheduled, which increased the probability of higher levels of unplanned outages, the timing of which is generally uncontrollable.

	Q1	Q2	Q3	Q4	2002	2001
Epcor	1.0	1.4	1.0	0.8	1.1	1.6
Atco	3.2	5.6	6.7	2.6	4.5	3.4
TransAlta	7.1	8.5	13.0	17.0	11.2	8.1
MW Weighted Average	4.7	6.0	8.5	9.6	7.1	5.4

Table 2, 2002 Outage for PPA Units (%, *excluding planned outage*)

	Q1	Q2	Q3	Q4	2002	2001
Epcor	5.6	1.4	1.0	1.0	2.2	5.3
Atco	3.2	20.1	6.7	2.6	8.0	6.3
TransAlta	11.2	8.5	17.7	17.0	13.4	13.6
MW Weighted Average	7.9	9.4	10.9	9.6	9.3	9.8

Table 3, 2002 Total Outage for PPA Units (%, *including planned outage*)

3 REVIEW OF THE RETAIL MARKET

The MSA became involved in retail market issues to a much greater extent in 2002. The following are some of the key issues the MSA had a role in moving forward through the year.

i) **Alberta Settlement Committee (ASC)**. Throughout 2002 the MSA was an active participant in work around the settlement process, including sitting as an observer on the ASC and playing an active role on various sub-committees of the ASC. In particular, the MSA assisted in the design of the Post Final Adjustment Mechanism (PFAM) process and the Dispute Resolution process implemented into the Settlement System Code during 2002. Both of those were important steps for the market, enabling final settlement to occur for 2001.

The MSA also currently sits as an observer on the Compliance and Monitoring Committee, which is working to design reporting and enforcement structures.

Governance of the ASC changed during 2002. Until September, the ASC was chaired by Cap Gemini (Ernst & Young) and reported to the Minister of Energy, who held responsibility for the Settlement System Code under the Roles, Relationships and Responsibilities Regulation. Changes to that regulation then passed responsibility for the Settlement System Code to the Power Pool Council, and accordingly placed the ASC under the guidance of the Power Pool. Recently, Ken Christensen has been appointed Vice-President Load Settlement and will oversee this function in the new Alberta ISO. Currently, a team of three with Peter Wong as Director, Load Settlement, is responsible for this function at the Pool.

ii) **Code of Conduct Audits.** As part of the duties carried out by the MSA on behalf of the Power Pool Council, Section 9.1(1)(b) of the Electric Utilities Act (Act) requires the surveillance of the relationship between the owner of an electric distribution system and its affiliated retailers. *The Code of Conduct Regulation* (Code) sets out specific requirements and guidelines intended to govern that relationship.

The stated objects of the Code are to further the development of competitive electricity markets in Alberta, to foster fair competition for all participants in those electricity markets, and to benefit customers by enabling owners and their affiliated retailers to pursue practices that create cost efficiencies in their operations but do not create unfair competition.

In addition to the duties passed to the MSA under the Act, the Code sets out specific monitoring and enforcement responsibilities for the MSA in relation to the dealings between the owners, affiliated retailers, customers and other parties in the retail market. Apart from other reporting requirements, the Code requires that each owner have an audit prepared by an independent auditor within 15 months after their affiliated retailer begins to provide retail services to customers. Thus, audits were required of certain parties for the 2001 calendar year. The MSA can require further audits thereafter. The purpose is to determine whether the owner and its affiliated retailer have complied with the Code.

EPCOR Distribution Inc. (EPCOR), ENMAX Power Corporation (ENMAX) and ATCO Electric Ltd. (ATCO) are the owners subject to the Code at the present time, as for the 2001 calendar year.

EPCOR and ENMAX filed audit reports with the MSA for the 2001 calendar year and, after its review of those reports and other information provided by the owners, the MSA accepted the reports. The MSA advised stakeholders on the matters in a letter posted to the MSA website in July 2002.

ATCO made an application to the Alberta Energy & Utilities Board (EUB) to be granted an exemption from parts of the Code, to facilitate its business operations in anticipation of the proposed sale of its retail electricity business. The EUB granted to ATCO additional time to structure its operations so as to meet Code requirements; this time period was extended by further application(s). In December 2002, ATCO Ltd. announced that it had entered into an agreement with Direct Energy in respect of the sale of the retail energy business (natural gas and electricity). The EUB will likely be dealing with this matter in 2003 and the MSA will continue to monitor the ATCO situation.

The MSA has requested that EPCOR and ENMAX have audits prepared for the calendar 2002 period, and in September 2002 began working with those parties around audit procedures for this purpose. Further, the MSA has requested that the owners submit the logs and annual reports required pursuant to the Code, in relation to 2002.

iii) Code of Conduct Changes. The Code regulation is slated to change along with the Act and other regulations, pursuant to the industry restructuring. Due to its integral role in relation to the Code, the MSA began in July 2002 to provide comments to the government around suggested enhancements to this regulation. During 2002, the MSA received inquiries around the marketing of non-regulated retail services by entities supplying regulated services to customers. Among other things,

questions were raised about the practice of including materials promoting non-regulated supply contracts in the billing envelope of the Regulated Rate Option (RRO) provider. This would potentially have implications to various Code provisions.

The MSA undertook a broad review of the matter. In the context of this review, the MSA also looked at aspects of the Code dealing with sharing of customer information and the premise that such information should not be shared between the owner (given responsibility for provision of regulated services such as RRO) and its affiliated retailer (providing non-regulated retail services). The impact of the contracting out and the sale of customer arrangements were noted.

With respect to the issue of the sharing of customer information, the MSA in part, believes that the Code must recognize the fact that significant customer information has already passed from the owner to the RRO retailer (affiliated or otherwise). As such, the Alberta government (as the market designer) must be clear in its intent as to what customer information the Code seeks to control, in furtherance of the purpose and objects of that regulation. The Code must also be clear as to whether the retailers who currently supply RRO customers are intended to have the exclusive right to all customer information currently in their hands, or whether the retail market design would benefit from a broader sharing of that customer information. To the extent that access to customer information is part of the market design, the Code should clearly delineate any subset of that customer information which must be considered confidential under all circumstances.

The MSA has prepared a report on these matters, and has addressed related issues in its comments to the government toward the drafting of a revised Code.

iv) **Response to Navigant Report.** Late in 2001, Alberta Energy commissioned Navigant Consulting to review competition in the retail market in Alberta and to report its findings. In late March, Navigant submitted its report entitled "Improving the competitiveness of Alberta's retail electricity market". The MSA reviewed the report and provided written feedback to the department on sections of the report that specifically dealt with the role of the MSA in the retail market. The intent of this feedback was to provide additional information from an MSA perspective to facilitate more complete consideration of the reports conclusions relative to the MSA function.

4 DECISIONS OF COUNCIL

The MSA undertook one formal investigation in 2002 – relating to the question of whether it was within the Balancing Pool's mandate to import electricity to Alberta. In addition, there was follow-up activity to two decisions of Council that were made in 2001. The following sections describe these matters.

i) Adjustment to Customer Bills. In December 2001, Council considered a formal report filed by the MSA and issued its Decision with reasons. The matter at hand was a complaint by the Industrial Association of Southern Alberta (IASA) concerning their electricity bills over the course of 2001. Load settlement issues (widespread in Alberta at the time) combined with specific issues in Lethbridge caused by some data transfer problems led to customer bills that were somewhat inaccurate.

Council's decision asked retailers in the Lethbridge zone to file with the MSA, their proposed plans regarding the handling of final settlement by the end of January. The retailers duly filed their plans and the MSA was pleased with the level of cooperation shown. Final settlement for 2001 did not take place until the fourth quarter of 2002.

The MSA is pleased to be able to report that the retailers have dealt with final settlement for 2001 and the MSA is now able to bring this complaint to a close. Load settlement's progress through 2002 has been encouraging and more improvements are expected in 2003.

ii) Offer Behaviour. In September 2001, Council considered a formal report from the MSA concerning certain offer behaviour exhibited by some generators in the market. The behaviour involved the use of Locking Restatements combined with other information provided by the Power Pool in an effort to drive up Pool prices. Generally, the strategy was successful at moving price up when conditions were such that the supply curve showed a relatively large increase in price as a result of a change in supply of only a few extra MW.

Council directed the Pool's operations group to assess all the information that the Pool makes available on its website, to address the concerns of the MSA with respect to the use of the Locking Restatement, and to work with industry to try to put benchmarks on the limits to economic withholding.

In the first half of 2002, the operations group published a paper and held a workshop on economic withholding. Additional stakeholder meetings were held over proposed Pool rule changes that would limit the use of Locking Restatements. Suffice to say that consensus of all parties was not achieved and is likely not achievable. Ultimately, 'guidelines' were

prepared jointly by the operations group and the MSA around limits to the use of Locking Restatements and the MSA took on the role of enforcer of those guidelines. This proved to be an interesting experience for the MSA as it involved some significant interaction with participants in seeking to achieve a common understanding of what are allowable uses of Locking Restatements.

The guidelines and related materials were posted on the Pool and MSA web sites on June 17, 2002. The MSA began monitoring and enforcing the guidelines approximately one week after they were published, to allow market participants sufficient time to adjust their trading activities to meet the new restrictions on use of the Locking Restatement.

The table below summarizes Locking Restatement activity since May 2002. Compared with May and June, (the months leading up to the guidelines), Locking Restatement activity inside T-30 has stabilized. The MSA recognizes that there is a base level of Locking Restatements in real time required each month to position units to provide ancillary services or react to unanticipated changes in a unit's operating characteristics due to an unforeseen event such as mechanical failure. However, the MSA has made requests of a number of participants to provide details surrounding specific Locking Restatements. Although the MSA has not, to date, recommended to Council that a participant be sanctioned for misusing a Locking Restatement, several warning letters have been issued to participants who, in the view of the MSA, could not provide acceptable operational reasons for Locking Restatements initiated in real time.

	May and June	**Q3/02**	**Q4/02**	**Total Since July 1**
Total	318	414	415	829
Real Time (< T-30)	245	79	73	152

Table 4, Locking Restatement Frequency

iii) Balancing Pool Import Activity. In February 2002, MSA staff observed that the Balancing Pool, through its agent, was importing energy through the Alberta-B.C. transmission interconnection. The activity was unusual, in that the MSA had not seen the Balancing Pool importing energy on any previous occasion. Several other parties contacted the MSA, voicing concerns about whether the Balancing Pool was allowed to trade in this fashion. Because of the unique characteristics of the Balancing Pool and due to concerns expressed by other market participants about the activity, the MSA undertook an investigation into the matter.

It is not clear by the governing legislation, regulations or rules whether the mandate of the Balancing Pool contemplates the use of the tie line connections to import energy. The concerns raised by other market participants in this regard indicated a perception that such activities were neither within that mandate nor beneficial to the market overall. However, after a detailed review, the MSA concluded that such trading activity by the Balancing Pool (import of energy) is within the mandate granted to it by the *Electric Utilities Act* (Act) and related regulations.

Further, in the view of the MSA, the Act, regulations and the Power Pool Rules clearly set out that the Balancing Pool will be a market participant, with accordant rights and responsibilities. Conceivably, such rights and responsibilities might be constrained if required to ensure the fair, efficient and openly competitive operation of the market. In fact, the Balancing Pool has been made subject to certain unique constraints on its offer behaviour, due to its relative size and other factors.

Generally speaking, the market anticipates that participants will, in the normal course, conduct a variety of trading activities designed to manage risk and generate revenues and profits. Import of energy is a normal activity for market participants. Having regard to the unique characteristics of the Balancing Pool, the MSA concluded that such import activity by the Balancing Pool generally should have no adverse effect on the fair, efficient and openly competitive operation of the market. Thus, there did not appear to be any reason to limit import activity by the Balancing Pool on this basis.

Upon the conclusion of its investigation, the MSA presented a detailed report about the matters to the Power Pool Council. The Council agreed with the findings of the MSA and authorized the publication of a report on the MSA web site in order to provide information and certainty to the market. The report was published in April 2002.

5 MARKET ISSUES

Throughout the course of the year, the MSA dealt with a number of issues, either presented by market participants or observed through internal market monitoring activities. As we move forward, it is the hope of the MSA that most problems in the market requiring its attention can be handled in this informal way. The following are some of the more serious issues that occurred during 2002 and the steps taken by the MSA in addressing them. Note that the MSA sees its role not as the problem solver per se, but rather a facilitator in bringing together the relevant parties to develop solutions.

i) Non-Compliant Generator. It was brought to the MSA's attention that there was a significant-size non-Power Pool participant generating unit flowing energy into the grid. The *Electric Utilities Act* (Act) and related regulations indicate quite clearly that (apart from certain limited exemptions) all electric energy entering or leaving the Alberta Interconnected Electric System (AIES) must be exchanged through the Power Pool. Thus, there appeared to be a potential breach of the Act. Furthermore, this generator's actions were creating issues in the Pool's settlement system.

In the view of the generator, it was simply wheeling power from one load centre to another and effectively remaining a consumer on a net position at all times – meaning that they consumed more than they generated. However, when energy enters the AIES, which includes the distribution system, it is necessary to exchange that electricity through the Power Pool. One significant exception to this rule is that an industrial system may apply to the Alberta Energy and Utilities Board (EUB) for an exemption if the energy is moved over short distances through the distribution system to another part of the same plant complex. This case did not involve an industrial process nor did the generator have an EUB exemption.

Discussions were held with the generator, its retailer and the wires owner. When all of the relevant facts were compiled, it was clear that the generator was required to become a Pool participant and has subsequently done so.

On a related note, in light of the misunderstanding referenced above, the MSA sent letters to wire service providers in Alberta discussing the requirements of the Act and requesting all to review their systems for non-compliant generation. The parties were invited to contact the MSA with any questions in this regard, and in fact the MSA has provided subsequent clarifications to several parties.

ii) **Settlement Issue.** The MSA was contacted by a group of Rural Electrification Associations (REAs) concerned that their Load Settlement Agent (LSA) was using settlement data for the billing of system access without their consent and thus in breach of the Settlement System Code. They also raised a concern that the settlement calculations were chronically and significantly miscalculating the energy consumption by the REA members.

Regarding the first matter, the Settlement System Code clearly states that settlement data cannot be used for other purposes without the consent of the relevant REA. The MSA clarified this with the implicated LSA (wires owner) in order to put a stop to the practice. The parties were left to work out a process to provide the wires owner with the appropriate information from the REAs for the billing of system access.

Regarding the second matter, the REAs provided the MSA with several sets of customer data in support of their allegation, allowing the MSA to test the accuracy of their billing at final settlement. In essence, the MSA was comparing data inputs (DCM) with settlement outputs (WSD). The analysis of the data found a good correlation between DCM and WSD values and did not show that the settlement engine was miscalculating the data in any material fashion.

The parties involved cooperated with the MSA on these issues, and they appeared to have made progress toward resolving their misunderstandings around settlement. The lines of communication appear to be more open now and the MSA hopes that this will help the parties move forward.

iii) **Zero Dollar Offers.** Over the course of 2002, the MSA heard concerns from a number of market participants that the market price was being depressed by zero offers. These concerns were referring to the energy that is offered to the Power Pool's spot market at $0/MWh. This is commonly termed 'price taking', although in economic theory price taking means pricing at short-run marginal cost. The situation was highlighted by two hours in the middle of summer when the hourly Pool price was $0.01/MWh. The issue is whether the market is indeed being negatively affected by zero dollar offers, and what, if anything, should be done about it.

The MSA is currently in the process of concluding a brief study on the matter and expects that the results will be available to the market in Q1/03.

iv) **Importing Below Cost.** Early in the year, a matter came to the MSA's attention through several participants, and through internal market monitoring activities. The concern was that market prices were soft but there still seemed to be a high level of imports that did not appear to be

supported by the price spread between the Alberta market and external markets. Participants were concerned that one of the more frequent importers was deliberately importing energy at a loss with a view to depressing Pool prices. One participant went even further and speculated on some anti-competitive reasons for taking this action. The issue was whether dumping was occurring and, if so, what were the reasons for this action.

The MSA discussed the issue at length with the importer. The first point to note is that all the significant energy trading groups in Alberta are operating on a portfolio basis – that is they are managing their 'book'. At any given time they may be long or short meaning exposed to the hourly Pool price as either a seller or a buyer. A more risk-averse trader will elect to minimize the exposure to hourly Pool price through trading and possibly forego some profits. The importer in question explained that all their import activities form a part of their portfolio management.

Risk management is a normal part of commercial business. Managing risk by minimizing exposure to the spot price is quite acceptable. Where the MSA would take issue would be where risk management is done by managing Pool price – deliberately influencing Pool price on a sustainable basis either up or down. In this case, the MSA was satisfied that the participant's actions were not untoward.

v) **Outage Manipulation.** Late in the year there was a series of outages at one of the larger fleets of generating units in the province. The concern to the MSA was that the outages were being somehow 'managed' for the benefit of the generation owner and in a manner that could be detrimental to the market at large.

There is currently a reasonable generation surplus in Alberta that mitigates opportunities to exercise market power through physical withholding. However, significant portions of that 'surplus' are in the form of older, higher cost generation that is often economically shut in. This idle generation takes several hours to bring to market from a cold start and thus cannot respond to short-term events of a few hours duration. Thus, the operating surplus - the actual energy available to the System Controller as events unfold in the real-time market, is often much less than what would be indicated by an analysis of the system's capacity relative to the system load. One of the outcomes of this is that the Pool price is quite vulnerable to potential physical withholding and hence the concern over outages and derates. The forced outage of a significant unit will cause a price spike in most cases – this is normal market dynamics.

The MSA met with the plant owner and discussed the events surrounding the outages and derates. They indicated that the events were the

unfortunate outcome of a combination of many factors. The specific circumstances of each unit were also discussed. At the conclusion of the interviews the MSA accepted the explanations provided by the generator.

It must be remembered that a significant part of the Alberta generation fleet is now far from 'as-new' condition due to the normal aging process. Substantial maintenance is required to keep the units fully operational and maintenance requirements tend to increase over time.

vi) **Ancillary Service Issue.** The MSA received a call from Watt-Ex concerning the offer behaviour of one of the participants in the Ancillary Services market, specifically the market for active regulating reserve. The concern was that the offer behaviour was anti-competitive. Further, it appeared to have possible ramifications on the Balancing Pool's MAP II auction of capacity that included products with regulating reserve capability.

The MSA interviewed the market participant about the matter and concluded that the behaviour resulted from human error and was not part of any scheme on their part to manipulate this market.

vii) **Price-Chasing Units.** The regular visitors to the MSA's website will have observed a letter from Director, Wayne Silk, about a certain offer behaviour into the Power Pool's spot market. Basically, these generators are usually offering all their capacity at $0/MWh but declaring 0 MW available until the Pool price reaches a level at which they elect to provide energy to the AIES. They indicate this willingness using an energy restatement which is available to all generators at any time of the day with no limits on frequency (in contrast to Locking Restatements that may only be used once per day).

The MSA's view is that energy restatements are intended to enable generators to show their actual physical availability to the System Controller. Many of the older units in the system suffer derates and short-term outages during the day and need this flexibility. Energy restatements were not intended to be used as a market tool. However, the specific wording of the rule surrounding energy restatements does not indicate this limitation.

The letter indicates the MSA's position on the matter. Monitoring of the activity will continue and the MSA may intervene if the activity is deemed to materially affect the fair, efficient, and openly competitive operation of the market.

viii) **Import Behaviour.** Over the course of the year there were several occasions when the Pool price fluctuated sharply from hour to hour in a

saw-tooth fashion seemingly in lock step with the import volumes of one of the importers. The concern was that the importer was exercising market power on the interconnection.

The MSA spoke with the importer about the behaviour. Part of the answer lies in the Pool rule change of December 2001 that requires all imports to be price takers – that is, offering their energy at $0/MWh to ensure dispatch. This leaves the importer with an uncertainty about their ultimate selling price from the Alberta market if no direct sale or OTC trade has taken place. The importer explained that volume can be used as a surrogate to help protect the importers floor price. Sometimes the decision on volume may be incorrect by the importer leaving wild swings in Pool price given the steep supply curve. The explanation was found to be satisfactory, although it is noted that it only makes sense when the importer has some control over the total import volume. The sensitivity of Pool price to import volume does not distinguish who is actually bringing in the energy. The MSA continues to be concerned about the effects of imports and exports on the Alberta market and the potential for this behaviour to be seen as a form of physical withholding.

ix) **Distribution Charges.** A matter was brought to the attention of the MSA by two managers of large commercial buildings early in 2002. Both shared the same experience when moving from default supply to becoming self-retailers – a part of their distribution charges appeared to increase when they made the change.

The MSA's interest in such a situation is not with the actual distribution charges (they have presumably been approved by the appropriate regulator) but that a wires owner might treat retailers in an unequal fashion. In particular, the MSA needed to ensure that the wire service provider was not providing an advantage to its affiliated non-regulated retailer.

A retailer is not bound to pass on distribution charges to its customers but is required by regulation to show the amount on the customer's bill. The MSA contacted the applicable wires owner who was very cooperative in explaining the genesis of the problem and that measures were being put in place to resolve it.

In this instance, the problem stemmed from the way that the wires owner billed all its retailers – in aggregate form. In fact, the affiliated retailer was undercharging its customers in error. The error was fixed and the wires owner now bills the retailers on a site-level basis.

x) **Economic Withholding of Clover Bar.** Throughout 2001 and most of 2002, the Balancing Pool was responsible for the Clover Bar unit offers. The MSA received comments from a participant who felt that if the participant owned the Clover Bar units, these units would be running and therefore felt that Clover Bar was being 'withheld' from the market. The issue then involved ascertaining whether the Balancing Pool was engaging in physical withholding of the Clover Bar units.

The publicly-declared mandate of the Balancing Pool was to offer the units at 'variable cost'. In 2001, Clover Bar had most of its on-peak energy forward sold at the MAP I auction. These were one-year terms and expired at the end of 2001. Clover Bar was a key plant in 2001 and ran most of the time, particularly during on-peak periods. The generation mix changed over the 2001-2002 period and Clover Bar began to play a much less significant role to the system than in the past. For large parts of 2002 Clover Bar appeared to be shut in by the economics of the market. The MSA held discussions with the Balancing Pool and conducted its own analyses of the market economics. The results supported the view that the Balancing Pool would not likely reap operating profits during the on-peak period to cover operating losses during the off-peak period. This situation has prevailed and the new owners of the rights to dispatch of the Clover Bar units often seem to find themselves shut in by the economics of the market.

6 OTHER MSA ACTIVITIES

i) **Comments to *Electricity Utilities Act.*** During 2002 the Alberta government began rolling out its plans in respect of the restructuring of the electricity industry, including amendments to the Act and related regulations. The contemplated changes are significant in scope and impact, and the MSA has been actively involved as a stakeholder in the drafting process.

At a high level, the government laid out a plan that will see the existing Power Pool Council transformed into three new corporations, being the Independent System Operator (ISO), the Balancing Pool, and the MSA. These entities are to be independent of one another, and each will have a new governance structure. The existing Transmission Administrator will be part of the ISO, and steps were taken in 2002 to move that function to the Power Pool Council in anticipation of the restructuring. The MSA will answer to the chair of the EUB, but will remain independent of the EUB itself and will have a new tribunal process set up to hear matters relating to the mandate of the MSA.

Consultations in relation to proposed changes began in earnest in the spring, with the release of the government's discussion paper on policy around industry restructuring. Drafting of the new legislation began in the summer, and stakeholder consultations into proposed language continued until December. The draft legislation is now making its way through the legislative process, and is contemplated to be in force by mid-2003.

With the conclusion of the drafting and consultation process in relation to changes to the Act, the focus shifted to work on the related regulations. This process is expected to continue until May 2003. The MSA will continue to be actively involved, given its direct interest in many of the regulations, and its general interest and role in respect of market structure and rules.

ii) **Agency Process.** As the market evolves, participants are increasingly contacting the MSA with inquiries about new forms of business arrangements, seeking an indication from the MSA as to its position on a proposed arrangement. Innovation is seen by the MSA as a sign of health in the market, and contact by market participants is always welcomed.

One area where the MSA has seen significant activity is around new forms of agency arrangements. In particular, parties seeking to optimize their generating assets may look to retain expertise held by another party, in order to enter new markets such as ancillary services. How the proposed arrangements fit within the rules of the Power Pool or the governing

legislation and regulation is not always clear; hence, an advisory opinion from the Pool or the MSA can be useful.

One example of an arrangement posed to the MSA in 2002 was a structure wherein a unit owner would act on its own behalf in the energy market, while selling its Ancillary Service capacity for re-sale by a second party in the ancillary services market. The second party was already active on its own behalf in both the energy and Ancillary Service markets, and thus the proposed arrangement raised issues around not only Pool Rule 2.5.7 (appointment of an agent), but also information sharing and Rule 2.9.2 (undesirable practices). The MSA suggested to the Pool and the parties involved an approach to the agency application and an information sharing protocol to address the circumstances.

iii) **Information Sharing.** The MSA has concerns with respect to the type of information and the timing of the flow of the information shared amongst participants in the market. There are related issues around use of confidential information by market participants. In a general sense, the issues around sharing and use of confidential information in the electricity market have some analogies to the issues around "insider trading" in securities markets. Essentially, to the extent that information flows and information asymmetry can affect the fair, efficient and openly competitive operation of the market, effort is required to limit inappropriate sharing and use of confidential information.

The following are examples of arrangements raising concerns. First, the flow of information as to unit status between the operating staff of an owner of a PPA unit and its energy trading staff, versus the flow of such information to the buyer of the rights of the PPA. Secondly, as between a participant and a person contracted as the agent for that participant. Thirdly, as between participants involved in a joint venture project, such as a generating unit. This is not an exhaustive list.

In relation to specific matters brought to its attention, during 2002 the MSA set out protocols to be implemented by the parties involved, to protect the market against inappropriate sharing and use of confidential information. In addition, to assist MSA policy in this area, the MSA retained a consulting firm to prepare a report addressing problems and solutions around information sharing. The final report was received toward the end of January 2003, and is being considered by the MSA as part of its ongoing policy review.

One thing made clear by the report is that the MSA is in many ways at the forefront in policy around information sharing issues. The MSA plans to advise market participants early in 2003 as to its general policy framework and specific approaches proposed for implementation of the policy in the

Alberta market; one or more stakeholder workshops are under consideration.

iv) **Stakeholder Meetings.** The MSA held stakeholder meetings in February and again in November in both Calgary and Edmonton to present an overview of progress to market participants on its priority undertakings for the year. The other key objective of these meetings was to provide an opportunity for stakeholders to give the MSA their views on areas of concern or propose issues they feel should be priorities for the MSA. It is anticipated that a similar schedule of stakeholder meetings will occur in 2003. Notice of these meetings will be posted on the MSA website in advance.

v) **EISG Activities.** The MSA is a charter member of the Energy Intermarket Surveillance Group (EISG) which is an association of market surveillance groups from jurisdictions in Canada, the U.S., Australia, and New Zealand. This group meets twice per year to discuss issues of mutual interest. The MSA played host to the first conference of the year in April and sent two delegates to present at the second conference of the year which was hosted by the New York ISO in September.

vi) **Market Monitoring Tool Development.** In 2002, the MSA launched an initiative to develop enhanced software tools to facilitate more efficient monitoring and market analysis activities by the team's analysts, and to produce a standard set of reports for use by the group. This initiative was comprised of two phases of software design and development. Both phases were delivered on time and on budget.

vii) **Branding of MSA & Web site.** In Q1/02, the MSA established its distinct identity in terms of letterhead and publications, separate from the Power Pool. Along with this, the MSA created its own web page where interested parties can access MSA papers and reports as well as Council decisions on MSA investigations. (http://www.powerpool.ab.ca/market_surveillance). Access to the website is currently still via the main page of the Power Pool website, however, the MSA web page will be located under its own web domain in early 2003.

viii) **Staffing of MSA.** The MSA increased its resources in 2002, adding a Manager of Investigations and a student position to be filled by a co-op university student each year. At 2002 year end, the MSA team consisted of the Director of the MSA, a Manager of Market Monitoring, a Manager of Investigations, one Legal Counsel, and three Analysts.