Recreation Facility Energy Cost Increases

Impact Analysis

ARPA

Recreation for Life

ARPA is a provincial charitable not-for-profit organization with a voluntary board of directors dedicated to the promotion of recreation and parks and their benefits to the quality of life of all Albertans.

Our Vision…

"A province, and communities within, that embrace and proactively use recreation and parks as essential means for enhancing individual well-being and community vitality, economic sustainability and natural resource protection and conservation."

Our mission…

ARPA strives to build healthy citizens, their communities and their environments throughout Alberta.

For more information on ARPA, our programs or services, or the benefits of recreation and parks, please visit our website at http://www.arpaonline.ca.

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Executive Summary

This study was commissioned by ARPA in response to concerns among its membership about significantly increasing energy costs and their impact on overall facility operating costs. The concern was that increasing energy costs would result in some necessary facility maintenance not getting done and ARPA felt it perhaps should be approaching the provincial government about the serious impact of energy cost increases.

The study looked at six facilities and while the amount of information provided was incomplete in some areas the consultants believe that they obtained sufficient information to arrive at some representative conclusions and make some specific recommendations.

While energy costs represent the single largest increase in operating costs (increased by 119% overall from 1998 to 2003) they represent 25% of facility total operating costs today (up from 20% in 1998). Facilities are more impacted by electricity price increases as typically electricity represents over 80% of energy usage in an ice arena and 60% in a combined recreation facility or aquatic center. The good news on energy prices is that electricity prices, which occurred immediately after the market was opened to competition, have declined recently and the consultants believe current prices will be stable for the next number of years. Gas prices on the other hand have increased significantly since 1998 (from under $2/Gjoule in 1998 to about $6.50 today) and the consultants believe price increases to $8/Gjoule will occur in the next few years. There is a Government of Alberta program that provides some protection to all consumers against high gas prices.

This report provides some background on the Alberta energy market and describes how most recreation centers procure energy. In addition, it describes the study methodology for this report and details key findings, conclusions and recommendations. In addition the report provides some insight into future energy prices.

Key findings, other than the energy price findings described above, include the lack of any energy management initiatives being carried out to reduce energy or energy costs and the non-existence of any organized financial planning for future major expenditures including facility replacement. We also found that total facility operating costs increased by 52% since 1998 and that labor resources represent the single largest component of operating costs; they are 52% of total operating costs today – down from 59% in 1998.

Key recommendations include proceeding with a number of regional energy workshops, for ARPA members which was discussed last fall and especially including a component on the need for and value of energy management planning. In addition, it is recommended that ARPA develop a recreation facility energy audit program and include a database of members' energy usage which could be used to compare "best in class" energy usage facilities and share information on innovative cost effective energy initiatives. A further recommendation is that ARPA should initiate a specific action plan to follow up on 2002 Community Recreation Infrastructure Report and, finally, it is recommended that ARPA monitor members' energy costs (and include in the energy database) and initiate advocacy to the provincial government if energy costs exceed 35% of total operating costs.

Energy Market Background

Energy costs for recreation facilities are an important component of facility operating costs. The Alberta Recreation and Parks Association (ARPA), in response to members concerns and based on what they were observing and hearing about energy price increases, especially electricity prices, initiated this project in late 2003.

The electricity market transitioned from a fully regulated market to a partially deregulated market on 1 January 2001. The generation and retailing of electricity were opened to competition, while the delivery of electricity via the high voltage transmission system and the lower distribution voltage network remained regulated services. The electricity transportation system will continue to be a regulated system.

While all customers in Alberta had the ability to select a retailer on 1 January 2001 the market changes allowed for a phasing in period where initially only larger customers had to select a retailer. Smaller customers – those using less than 250,000 Kwatt-hours of electricity annually - (and this included almost all small community ARPA members) had an option to have their Wire Service Provider make contractual arrangements with a generator or owner of the output of a generating unit on their behalf. This is what is referred to as a Regulated Rate Option (RRO) and it was a transition measure put in place by the provincial government, due to concerns about the lack of a robust competitive marketplace when the market opened up to competition. The original expiry date for the RRO option for small business and commercial facilities was December 2003, however, because of ongoing concerns about the competitiveness of the retail sector this has now been extended to mid-year 2005.

The electricity market transition process for the period 2001 to 2003 can best be characterized as a time of major confusion, inadequate communication, lack of readiness and significant billing issues. In a 2003 report prepared by the Alberta Council on Electricity, at the request of the Premier, recommendations included expanding consumer education; improve billing practices and customer satisfaction and monitoring progress in the retail mass market.

Prices for electricity increased significantly when the market initially opened up. (Refer to Appendix B – Historical Power Pool Prices). We believe this was due to a very tight electricity supply/demand situation, which occurred because of minimal investment by either the public or private sector in generation of electricity during the lead up years to opening the market to competition. In addition, a very robust economy in the mid-nineties quickly increased demand to almost match supply. Market transition costs also contributed to price increases.

The province of Alberta is somewhat unique in so far as it is electrically speaking an island, having very little ability to import or export electricity to other provinces or to the United States. However, this is also an advantage as there is an abundance of generating capacity, especially gas-fired generation, in the province.

Since markets opened up to competition, private sector investment in traditional generation and new renewable energy generation facilities has been significant. Today, Alberta has a healthy supply/demand gap for electrical generation and a well functioning competitive real time pricing market and, as a result, prices for electricity commodity have decreased significantly from the initial market opening up prices. Wire Service Provider charges during the period 2001-2003 were a confusing array of current regulated tariff prices and various rate rider charges, mostly relating to commodity shortfalls experienced by the Wire Service Providers in the year 2000 and RRO shortfalls in 2001. All existing Rate Riders expired at the end of 2003 and RRO pricing is now based on market flow through prices, which means there should not be any future Rate Riders related to RRO. Contrary to many views Wire Service Provider regulated tariff rates for access to the Transmission System and the Distribution System have not increased significantly since the market opened to competition. In many instances tariff rates have been simplified.

However, notwithstanding the positives described above, the overall transition continues to be confusing for most consumers of electricity. Where previously electricity was generated and delivered as a bundled service by a local monopoly service provider, with deep roots in communities across Alberta, consumers now have to deal with at least two separate entities – retailers and wire service providers. Billing information is much more complex as there are several line item costs on a bill and the load settlement process, which allocates hourly pricing of electricity generated and consumed by users is complicated and historical billing information can change months after the period the electricity was used.

While gas has been deregulated for most small industrial consumers in Alberta since 1996, few recreation facilities have opted to exercise customer choice, preferring to have their existing utility continue to supply them under a regulated rate option, similar to the electricity RRO. In some locations, if the gas supplier is a rural co-op or a municipal owned gas utility customer choice is not available. Generally gas prices have been low in Alberta so there was not much incentive or desire by consumers to seek out retailers until recent price increases occurred. The increases were due to a strong export market for gas to the US and the increasing use of gas to generate electricity. Gas prices, which historically have been in the $2 - $4 per Gigajoule are now in the $6.50 to $7.25 range. (Appendix C)

As retailers entered the electricity market they also offered gas retail options to consumers, leveraging the obvious synergies of similar billing platforms and customer service call center services.

Recreation Facility Energy Procurement Options

The larger community recreation facilities are typically owned and operated by the local municipality. These buildings are typically one of the top three municipal owned energy consumer facilities. In smaller communities volunteer boards, operate the recreation facilities, on behalf of local government. Typically these facilities are eligible for the electricity Regulated Rate Option supply.

In 2001, recreation facility owners and operators basically had two choices for supply of electricity – sign a contract with a retailer for a fixed price and period or elect to be supplied by their Wire Service Provider on the RRO rate. The choices were analogous to a homeowner mortgage choices of a fixed price fixed term mortgage or a floating mortgage.

On the gas side most recreation facility owners and operators continued to be supplied by their incumbent gas utility company. These utilities charge a monthly rate for gas, based on an estimate of what the current monthly market price will be. If actual gas costs during the month are higher or lower than estimate then rates will be increased or decreased the following month to make up the deficit or refund the surplus. In addition, consumers are eligible for rebates under a provincial government program – Natural Gas Rebate Program - that runs from November to March each year. The rebates are based on a scaled amount, based on price and activate when the consumer price of two of the three regulated gas companies hits a threshold of $5.50/Gjoule. The rebates apply equally to all customers, including those on retail contracts and will run until March, 2006.

The Association of Urban Municipalities of Alberta (AUMA) initiated an electricity aggregation program on behalf of its members and associate members (which some smaller recreation facilities were eligible for) and signed a three year aggregation contract for electricity with a retailer commencing January 2001. In mid 2002 they signed a similar aggregation contract, with a year-end 2003 expiry date, with a gas retailer. An analysis of the benefits of the aggregation program for those members who elected to join the aggregation program showed that those municipalities within Aquila Networks Canada service area saved approximately 5%, while municipalities served by Atco Electric costs were comparable to their RRO commodity costs. The reason for the difference was due to the contractual provisions each of the Wire Service Providers made to procure RRO obligations – Aquila purchased blocks of power for various periods of time, which resulted in some price stability, whereas Atco only purchased electricity to meet short term needs and consequently their pricing tracked market prices more closely than Aquila's. The big advantage for the AUMA aggregation customers was price stability and certainty for a three-year period. A similar analysis on gas was not carried out by the AUMA, however it's gas aggregation customers were sheltered from significant higher gas prices that occurred in late 2002/early 2003 and, in addition, the contract included an important consumption balancing mechanism, which provide some protection to members from spot market prices.

Approximately 50% of AUMA members joined their electricity aggregation program – however, this included most of the larger cities (excluding those with their own electric utilities) and towns. A smaller number joined the gas aggregation program.

All of the smaller municipalities, regional districts and villages elected the Wire Service Provider (WSP) RRO option. A small number of those recreation facilities were ineligible for the RRO rate and they defaulted to being a Default Supply customer of the WSP – this was basically a market flow-through pricing option.

In addition all of the smaller municipalities, regional districts and villages continued the status quo gas arrangements with their incumbent gas utility.

Study Methodology

The original ARPA plan was to select a representative sample of urban and rural recreation facilities, which would include some who joined the AUMA aggregation initiatives and some who were on the RRO option and look at the history of cost increases and the impact on overall facility operating costs and subsequent issues and concerns this was raising.

Details related to the scope of the project are included in Appendix A.

Originally five facilities were selected – three urban and two smaller more rural communities. However, due a combination of an inability to get the required historical information and the unwillingness of the selected parties to participate, only one of the original five selected facilities information is included in this report.

Additional facilities were approached and the final tally includes six facilities – one large city recreation facility, two medium size city facilities and three smaller center facilities. All of the facilities are ice arenas with two exceptions – one smaller center facility is an aquatic center and another smaller center is a combined hockey and pool facility.

Each facility operator was asked to provide their 1998-2003 revenue and total facility operating cost figures as well as a breakout of operating costs under four categories - labor, energy, contracts and other costs, and financing costs. In addition, a more detailed breakout of energy costs and consumption was requested.

Some facility owners were unable to provide all of the requested information – especially related to energy costs and consumption. However, we received sufficient information on overall revenues and costs to develop some conclusions. We had to use two facilities specific energy information to arrive at some specific conclusions related to energy consumption and costs – while this may not be reflective of all facilities the consultants were comfortable that the information reflected the overall trend.

The facilities are not identified by name. Summary information is included in Appendix D of this report.

Findings

Our findings are based on the cumulative data obtained from all six locations and we used year 1998 – two years before electricity customer choice was available to consumers - as the base year for comparison purposes.

- Revenue in year 2003 is 40% higher than in 1998. It was highest in year 2000 – 45% higher than 1998 and it dropped in 2001 – 30% higher than 1998 and was flat in 2002 and 2003 – 40% higher than 1998. We do not know what triggered the year 2000 increase. (Appendix D)
- On average the annual gap between revenue and total operating costs is about 11%. (Appendix D). This shortfall is made up from grants from different sources or from reserve funds.
- One facility only has been making annual debenture payments and it significantly accelerated the pay down of its debenture in 2003 to pay off the remaining outstanding amount owing. There is no outstanding financing on any of the other facilities.
- None of the facilities seem to have any provisions in place for future capital needs or future facility replacement. Capital expenditure planning seems to be ad hoc. Facility operators typically request funding for capital expenditures on an as required basis.
- We requested information on planned future capital expenditures, but did not receive information from any of the study participants.
- We also requested information on energy management initiatives, under way and planned. We received minimal information back on this question, which suggests that energy management planning, energy conservation and energy cost reduction initiatives have not been a big priority to date.
- As only one facility had provisions in its Operating Costs for financing we removed this category from our analysis of Operating Costs.
- Overall Operating Costs increased by 71% between year 1998 and 2003.

- Labor Costs are the largest portion of total operating costs – they represented 61% of total operating cost in year 1998, 56% in year 2000 and 54% in year 2003. During the period 1998 to 2003 total labor costs increased by 52%.
- Energy Costs represented 20% of total operating costs in 1998, 22% in year 2000 and 25% in year 2003. During the total period they increased by 119% - meaning that the 2003 total annual energy costs are 119% higher than the 1998 costs. Comparing the year over year changes - they increased 44% between 1998 and 2000, while the market was still fully regulated. The year-to-year cost increase from 2000 to 2001 when market prices for electricity were high was only 1% - this is due to the provincial government rebate program in effect in 2001. This masked the real price increases taking place that year. Prices increased by 51% between 2001 and 2002, comparing the year-to-year change and basically stayed flat in 2003. The actual year over year percentage cost changes are shown on the chart below:

Energy	1998	1999	2000	2001	2002	2003
Annual Energy Increases year to year	Base Year	2%	41%	1%	51%	0%
Cumulative Increases Compared to 1998	Base Year	2%	44%	45%	119%	119%

These numbers reflect the actual market prices for the commodity and include the addition of Rate Riders to recover the Wire Companies year 2000 revenue shortfalls and year 2001 RRO shortfalls (the provincial government capped the 2001 RRO rate at 13 cents/kwatt-hour).

- The energy cost split for hockey arenas is typically 80% electricity and 20% gas. Combined recreation centers energy split is typically 60% electricity and 40% gas.
- In 1998 electricity costs accounted for 70% of the total energy costs for all of the recreation facilities studied and this number was 71% in 2003.
- Services accounted for 19% of the total facility operating costs in 1998 and 20% in 2003.

Electricity Costs Analysis

Two recreation facilities provided us with detailed information on electricity costs, including their 1998 and 2003 bills. We originally had hoped to be able to break out the component costs of the 1998 and 2003 bills to determine the commodity and delivery charges for both years and compare them. Unfortunately, the 1998 billing did not breakout the charges for commodity and delivery. However, we were able to confirm that the annual electricity consumption for each of the recreation facilities remained almost unchanged over the period.

We were also able to compare the Wire Service Provider charges for year 2000 and 2003 and basically wire service charges remained constant throughout this period. In fact, when Aquila’s August 1 2003 approved tariffs and the WSP Distribution Adjustment Rider credit are included in the cost comparison, Aquila’s 2003 WSP charges are less than year 2001.

Future Energy Prices

Electricity

As indicated previously electricity prices increased significantly when customer choice was initially introduced in 2001. Hourly Pool Price volatility was high, which contributed to the average high hourly price of electricity. However, since 2001, prices have reduced, primarily because of the addition of 3,000 Mwatts of new generation – a mixture of coal, gas and renewable energy generation. This new generation has resulted in a healthy supply/demand gap for electricity. In addition, the wholesale market for electricity is working very well and the larger consumers of electricity are responding well to variable pricing.

There are a number of issues - most significant are the lack of retail competition for the small industrial, commercial and residential consumers; a lack of knowledge among consumers about how the electricity industry works; and, the inability of most customers to be able to adjust their usage patterns to respond to variable pricing. This latter issue is primarily due to the cost of the required metering that records consumption of electricity in real time. Currently most consumers including all recreation facilities in Alberta have cumulative revenue meters installed. These meters record the total consumption over a billing period and the WSP retroactively allocates this consumption on an hourly basis for the billing period, using a predetermined load profile. This process is called Load Settlement and the deemed hourly load profile is the same, no matter how electricity was actually consumed during the period. There is, therefore, no price incentive for cumulative metered customers to change their load usage patterns.

One positive is the entry of a new retailer into this market – Direct Energy has purchased Atco's electricity and gas retail business and this now means that there are two mass-market retailers in the Alberta marketplace. Epcor, which was previously in this market, has exited the mass market.

There is not a lot of market intelligence information available on future electricity pricing, however, the consultants believe that average pricing in the near term – next two to three years – will be less that the corresponding average pricing in the period 2001-2003. This is evidenced by the current prices retailers are quoting for three and five-year electricity contracts – less than 7 cents/kwatt-hour. In addition, the AUMA contracted its electricity and gas aggregation with a different retailer, on the expiry of its original contract and pricing for electricity was approximately 30% cheaper than the original contract. In addition, a number of other municipalities, including some recreation facilities owned by those municipalities, signed retail contracts that were closer to 40% less than prices paid in the period 2001 to 2003.

It is very important when making pricing comparisons to ensure that an "apples to apples" comparison is being made between various retail offerings and current RRO rates. There are a number of separate line item costs associated with electricity retailing – Commodity Cost, Power Pool Trading Costs, Line Losses, Unaccounted for Energy Losses and Retailing Fees and it is important when comparing prices to know what is included in the quoted cost.

The major unknown when looking at future electricity prices is the price of natural gas. The current generation mix in Alberta is 48% coal, 42% natural gas and 10% renewable. Coal fired gas plants are base load plants and produce in excess of 70% of Alberta's annual electricity. Gas fired plants are primarily used for peaking purposes and their costs determine the minute by minute System Marginal Price (SMP) during those periods. The average of the 60 hourly SMP prices are used to calculate the hourly Power Pool Prices for electricity.

While future planned generation additions include significant coal and some renewable generation, gas generation is also an important component of the mix and has advantages in terms of size and locations of units, efficiency, environmental approvals and relatively short lead times compared to coal generation. Future electricity pricing will be impacted by the mix of additional generation that is committed and put in service to meet future load growth. If gas becomes a significant part of that mix and demand for gas stays strong electricity prices will increase. However, if the forecast coal plants come on line, coal should continue to be the dominant electricity generation fuel source in Alberta and this should result in stable pricing over the next number of years.

Gas

The story with gas costs is quite a contrast to electricity – gas costs have increased significantly in the past six years – from a price of less than $2/Gigajoule in 1998 to a current price of close to $8 for fixed term one and three year contracts. (Appendix C – Historical Gas Prices). While the gas utility current monthly prices are in the $5.50 to $5.70/Gjoule range these are current month prices only and the fixed term retail prices available suggest a continued upward trend in gas pricing over the next number of years.

All gas consumers in Alberta are protected from high gas prices through the provincial government's Natural Gas Rebate Program, described earlier. This applies to all gas consumers, including those who sign retail contracts.

When the AUMA initiated its original gas aggregation procurement contract in late 2001 its negotiated price was under $5/Gjoule. The proposed standard commodity price under discussion when the new contract was being negotiated was approximately 30% higher than the previous contract.

Current fixed term retail contract price quotes are over $8.00/Gjoule for a three-year contract and slightly under $8.00 for a five year contract - http://www.customerchoice.gov.ab.ca/elect/images/summary.pdf

Also current monthly cost of gas from the Direct Energy is over $8/Giga-joule – actual numbers are included on the website referenced above.

An important consideration when looking at fixed term retail gas contracts is how Gas Volume Adjustments are managed contractually. Typically, customers are required to commit to a daily contracted volume for a facility and mechanisms are included in the contract to sell unused or buy additional gas on a daily basis at market prices. An advantage to aggregation programs, like the AUMA gas aggregation program is a mechanism included in the contract that allowed for sharing among the aggregation members of contracted volumes so that market pricing only became an issue when the aggregated contracted volumes were exceeded or in shortfall amounts.

Conclusions

- Energy costs have increased significantly for ARPA member recreation facilities during the period 1998 to 2003. Electricity price increases have a much more significant impact on operating costs, given the larger usage of electricity over gas energy, especially in hockey arenas.
- The good news is that electricity prices will most likely be less in the 2004 to 2006 time period than in the 2001 to 2003 period.
- On the other hand, gas prices have increased significantly and recreation facility operators can expect to see further increases in the next two to three year time period.
- While energy cost increases have had an impact on recreation facility operating costs the overall impact has not been as dramatic as it was initially thought to be. Energy costs have increased more than any other major operating cost component in the past six years – from 22% in 1998 to 25% in 2003 - they currently represent only 25% of total facility operating costs. If the current information about future energy prices proves to be accurate the consultants believe energy costs will be about 20% of total facility operating costs in the 2005-2006 time period.
- Very little emphasis has been put on energy management planning and energy and cost savings initiatives that would help recreation facility operators and owners better manage energy usage and costs. This is a fall-out from the fact that, historically, energy has been cheap in Alberta and paybacks for energy management initiatives have not meet facility owners' payback periods. The increase in energy costs has heightened recreation facility operators' interest in considering energy efficient equipment and technologies on planned new recreation facilities. However, there is still a big tendency to look at project capital costs and not combined capital costs and lifecycle operating costs for facilities. This needs to change.
- We believe that significant reasons for the relatively few energy management initiatives are consumer lack of knowledge and understanding about the changed energy marketplace in Alberta and not having energy management planning as a component of, or complementary to, capital planning processes. An example that best illustrates this is that if one considers an ice arena as a building envelope it makes very little sense to externally exhaust the latent heat to change water into ice through the condenser, while at the same time there is a gas line connected to the building to provide heat for dressing room and amenity areas. While timing of heat availability and usage can be an issue, there is some excellent technology today that allows for the storage of heat from the

condensers so it can be used at later times when required. If a recreation facility also has a swimming pool then the condenser heat can be used to heat the pool water.

- Recreation facility revenues do not recover operating costs.
- We observed almost no planning ahead for either major operating expenses, such as a compressor replacement or new roofing, or capital improvement projects. These items are dealt with on an urgency basis or requested basis where funding is sought from the municipality.
- A much more important issue is that there does not seem to be any planning ahead for future recreation facility major upgrade or replacement. This is a very significant issue, especially when we consider the ARPA 2002 Community Recreation Infrastructure Report, which indicates that by 2005 over 75% of all major recreation facilities in the province will be in the last half of their functional life expectancy and many will be nearing the end of their functional life.

Recommendations

- Last fall, ARPA considered committing to funding seven regional Energy Deregulation Workshops across the province for its members. Since then the Alberta Advisory Council on Electricity issued a report to the Premier on a number of consumer issues and top of their list of recommendations was the need to expand consumer education. The Office of the Utility Consumers Advocate (OUCA) was assigned accountability to address this issue. To date, they have not implemented any programs. We recommend that ARPA either:
    - Contact OUCA indicating their support for the need for consumer education and arrange to work with them to provide a program that would meet ARPA member needs, or
    - Proceed to develop their own workshop, focusing on their members needs.
- That part of the workshop focus especially on the need for, and value of, energy management planning.
- ARPA should develop a recreation facility energy audit program and offer it to its members. A key part of this program would include developing a database of information on its members' facilities that would include an ability to compare energy usage of its members' facilities and sharing best practices on energy management and innovation in cost saving techniques. This database of information could also be used to develop accurate records of age and condition of recreation facilities.
- ARPA should initiate a specific follow-up action plan on its 2002 Community Recreation Infrastructure Report as this study reinforces that there is no contingency financial planning being done at the individual recreation facility level in preparation for future facility replacement.
- ARPA should monitor energy costs and initiate an annual survey of its members to determine what percentage of total operating costs are spent on energy. If this number exceeds 35% they should pursuing the preparation of an advocacy document to the provincial government on the impact of energy costs on recreation facilities.

Appendix A

Scope of Services

The ARPA is a provincial, not-for-profit charitable organization that operates with a volunteer Board of Directors. ARPA has many members representing thousands of Albertans across the province. ARPA members include community and public recreation agencies throughout Alberta, along with educators, corporate, elected, lay and student members

ARPA members operate a number of community recreation facilities across the Province of Alberta. In some cases the municipality, as both the owner and operator of the facility, is a member of ARPA; in other cases a community “not for profit” organization, which operates the facility for the owner, typically a county, is a member of ARPA. Typically recreation facilities across Alberta are aging – by 2005, over 75% of all major recreation facilities in the province will be in the last half of their functional life expectancy. This means that most are facing normal increasing life cycle cost issues, such as replacement of aging equipment and structure rehabilitation, just to maintain continued operations.

Energy costs are a significant portion of the operating costs of these facilities and ARPA is concerned about the increasing costs of energy and gas. They believe that deregulation of electricity has resulted in increased energy costs and they are concerned that an increasing percentage of operating costs is required to pay energy bills. However ARPA does not have quantifiable information to support this belief and concern.

ARPA’s major concern is the combined impact of increasing life cycle and energy costs on operating budgets.

ARPA wished to highlight its concerns about the impact of increased energy costs and develop an advocacy position in support of parks and recreation facility operators across Alberta.

ARPA requires the following:

1. A comparison of energy costs for both gas and electricity for three urban and two rural recreation facilities for the period 1998 to 2003.
2. For electricity a comparison of each facilities annual total bundled costs of electricity (1998-2000) to its total costs after deregulation (2001-2003). The comparison will breakout the two major cost components – commodity costs (now de-regulated) and transportation costs (still regulated) and will factor in any “facility energy management” initiatives completed in this time period.
3. For gas a year over year comparison of annual costs per facility.
4. Forecast energy cost increase impacts for the period 2003-2008.
5. An estimate of total ARPA members’ energy cost increases, extrapolated from the above data.

Project Steps

1. Identify and select three urban and two rural recreation facilities – agreed to by ARPA utilities committee. One each in Calgary, Edmonton and Red Deer; Rocky Mountain House and Vegreville; Develop a template to collect the energy usage and costs, total operating costs, revenue generated, life cycle cost expended, including capital improvement costs for each facility for the period 1998 – 2003
2. Facility Operators to complete template data sheets
3. Analyze data and identify;
   a. Trends on Total Operating Costs and Revenue for the period
   b. Gas and Electricity energy costs as a percentage of the total annual operating cost for each of the facilities for the period and by year.
   c. Life Cycle Cost trends
4. Research and prepare information on forecast energy cost increases for the period 2003 to 2010.
5. Develop conclusions about energy cost increases and impact of these increases on future operating costs.

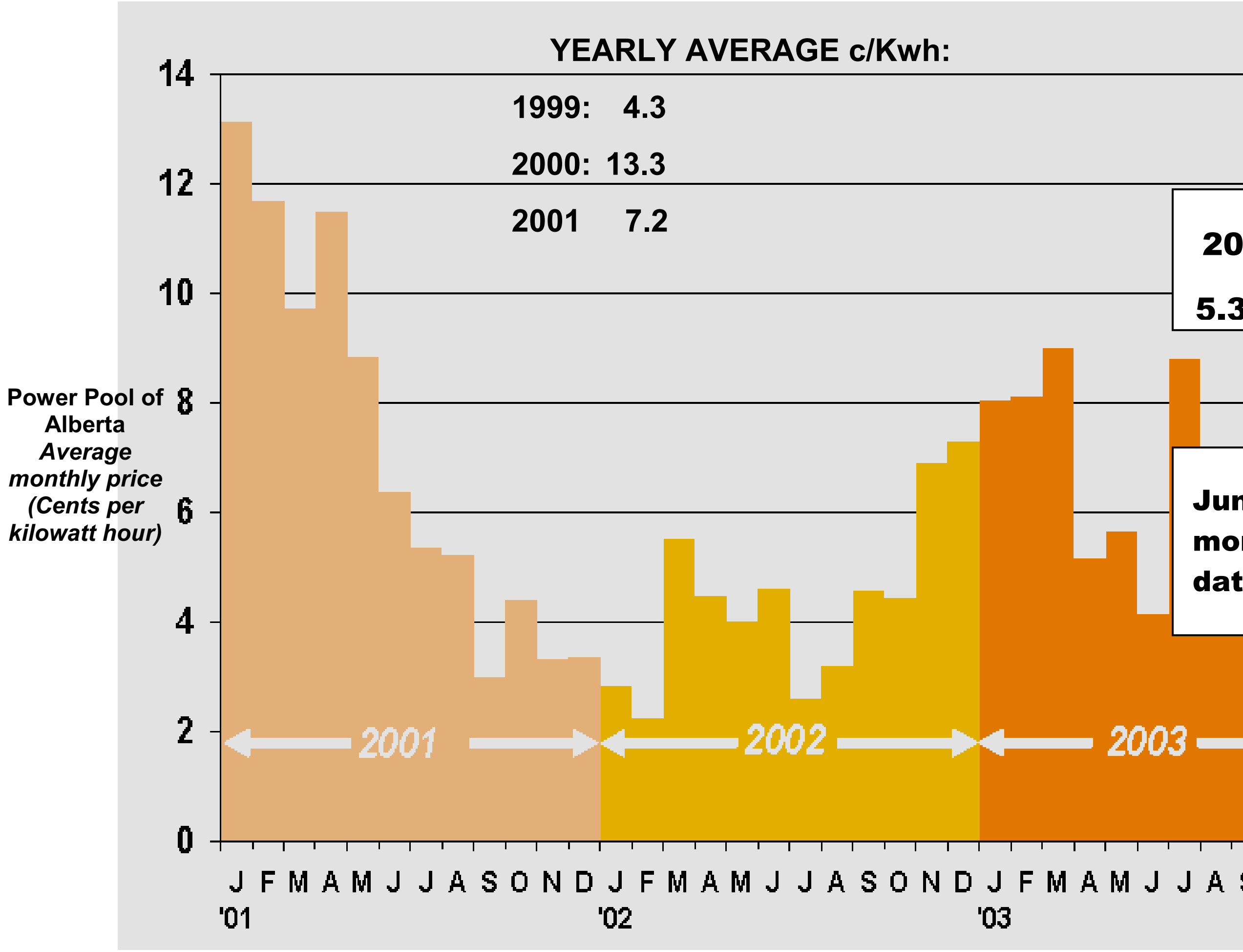
6. Prepare a brief presentation (15 minute Power Point presentation) on the scope of the project and preliminary findings in time for the ARPA Annual Conference in late October in Red Deer and present findings at conference.

7. Complete a written report of the finding, recommendations and conclusions.

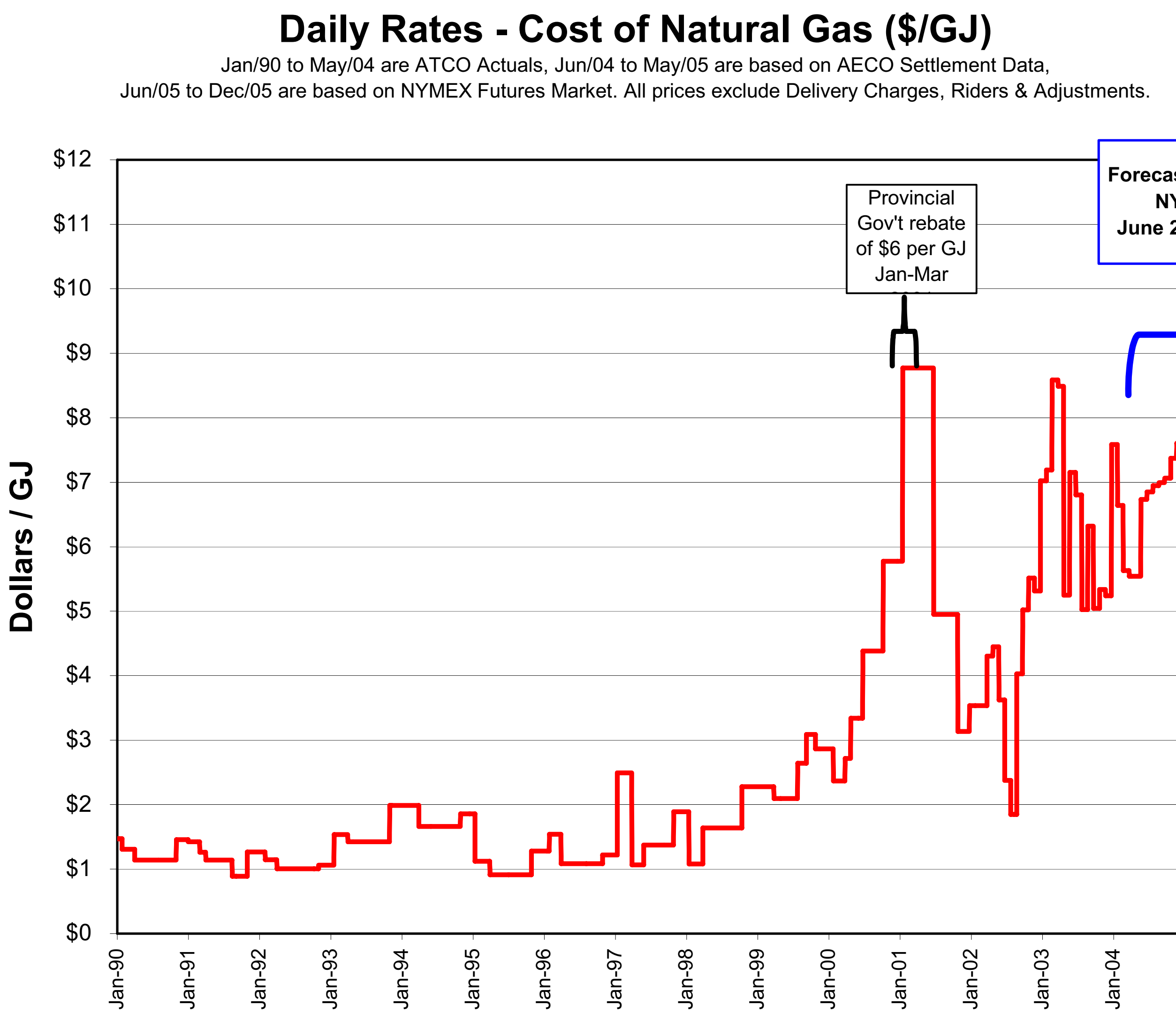
8. Prepare an ARPA advocacy document to be used to bring attention to the issue of increasing energy costs and their impact on community recreation facilities.

Appendix B: Power Pool Price History

(Note – These are Power Pool Prices, not Retail prices, updated as of 16 June 2004)

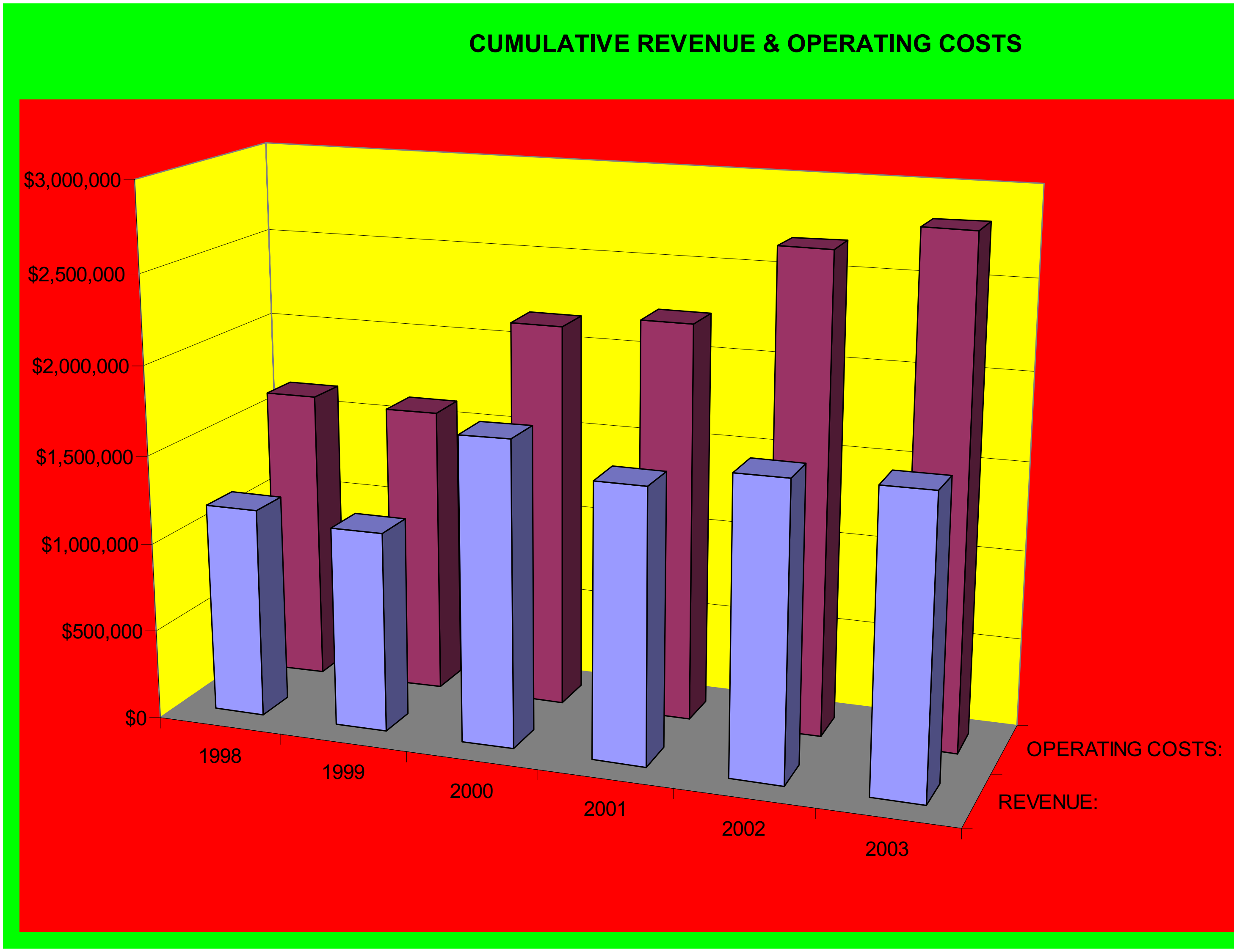


Appendix C: Historical, Current & Forecast Natural Gas Prices

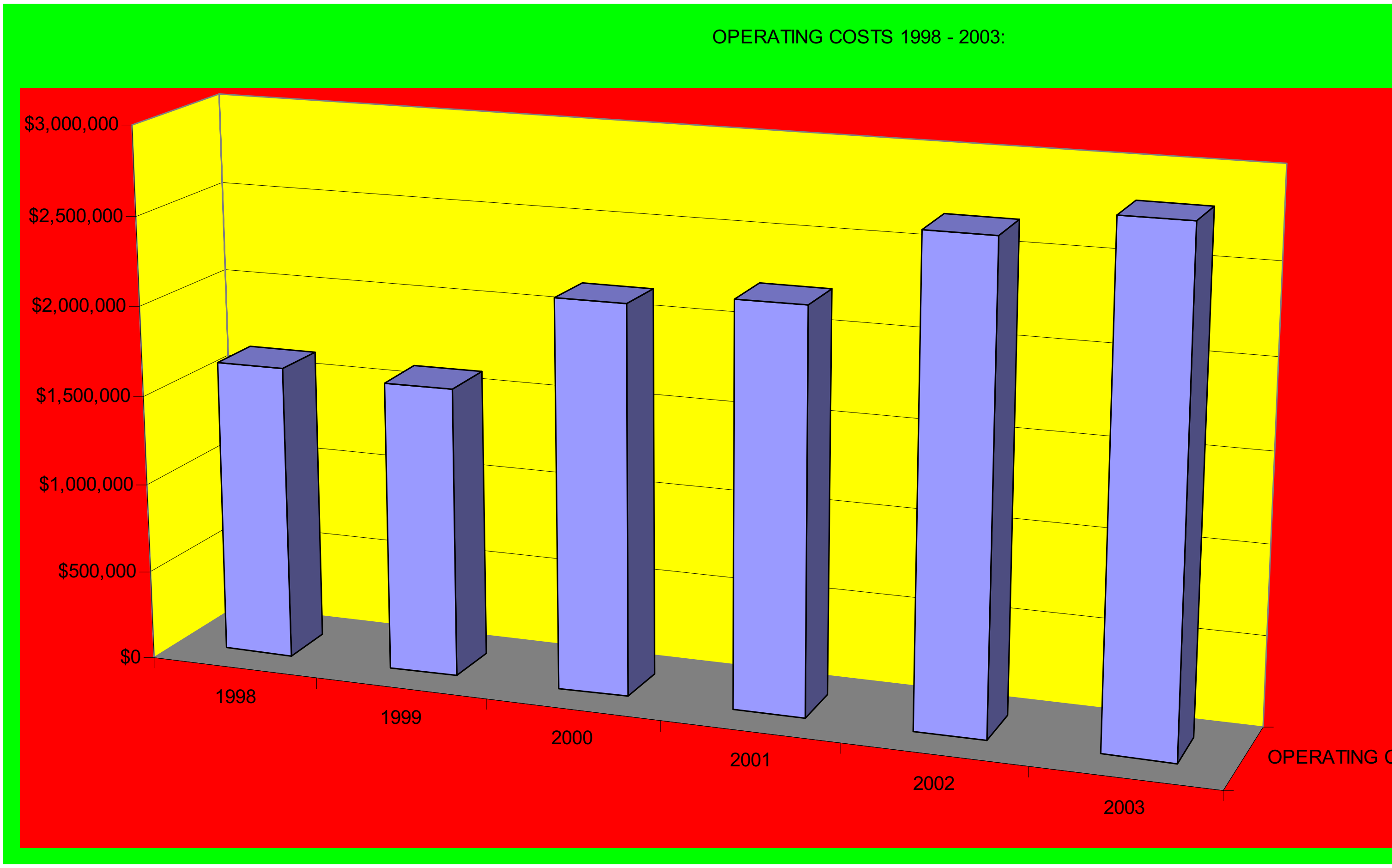


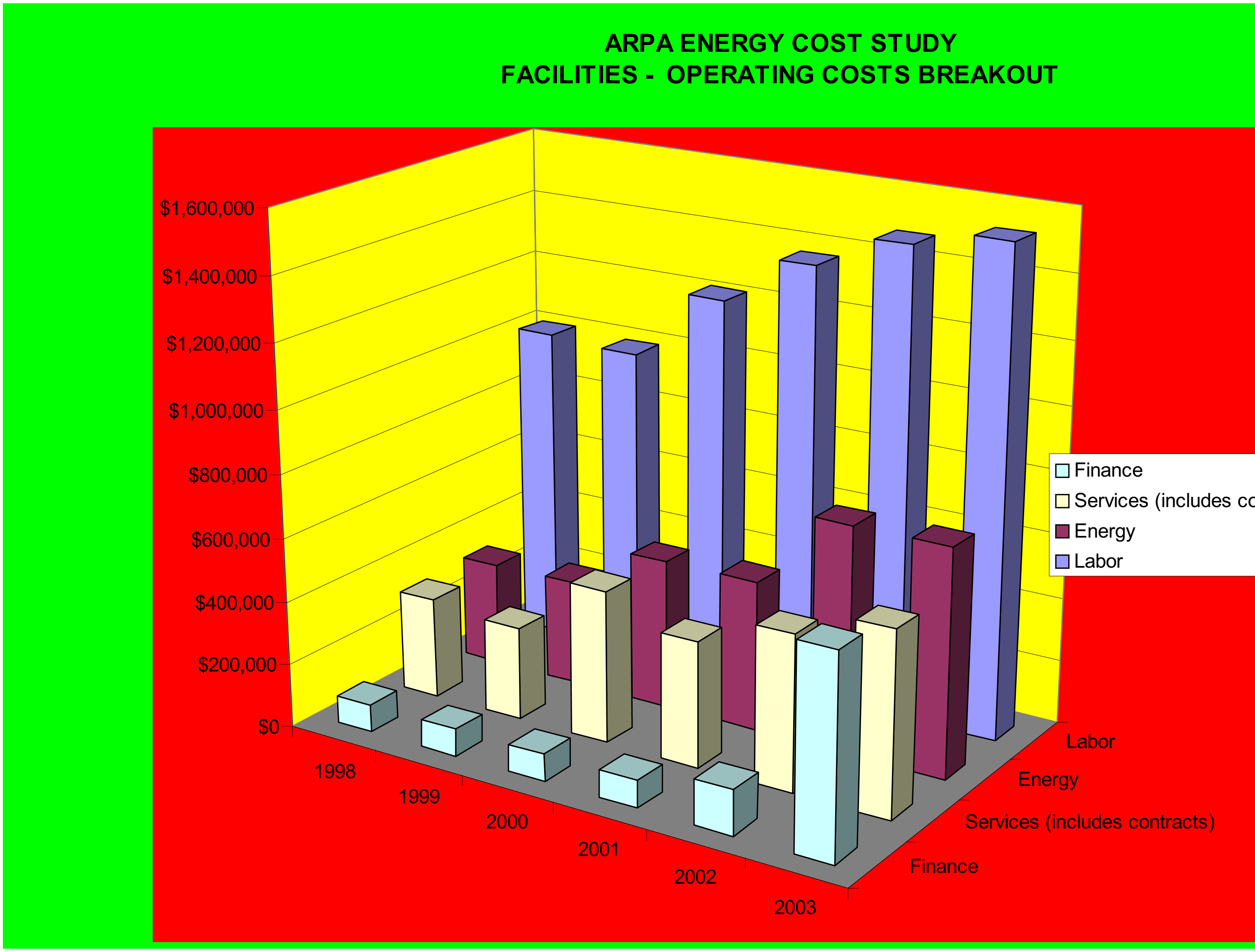
Note: Prices are gas commodity prices only – retail prices quoted may include retail services fees and other costs related to purc

Appendix D: Facility Revenue Vs Operating Costs



Appendix E: Facility Operating Costs Breakout




ARPA ENERGY COST STUDY
FACILITIES - OPERATING COSTS BREAKOUT
$1,600,000
$1,400,000
$1,200,000
$1,000,000
$800,000
$600,000
$400,000
$200,000
$0
1998
1999
2000
2001
2002
2003
Labor
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Finance
Finance
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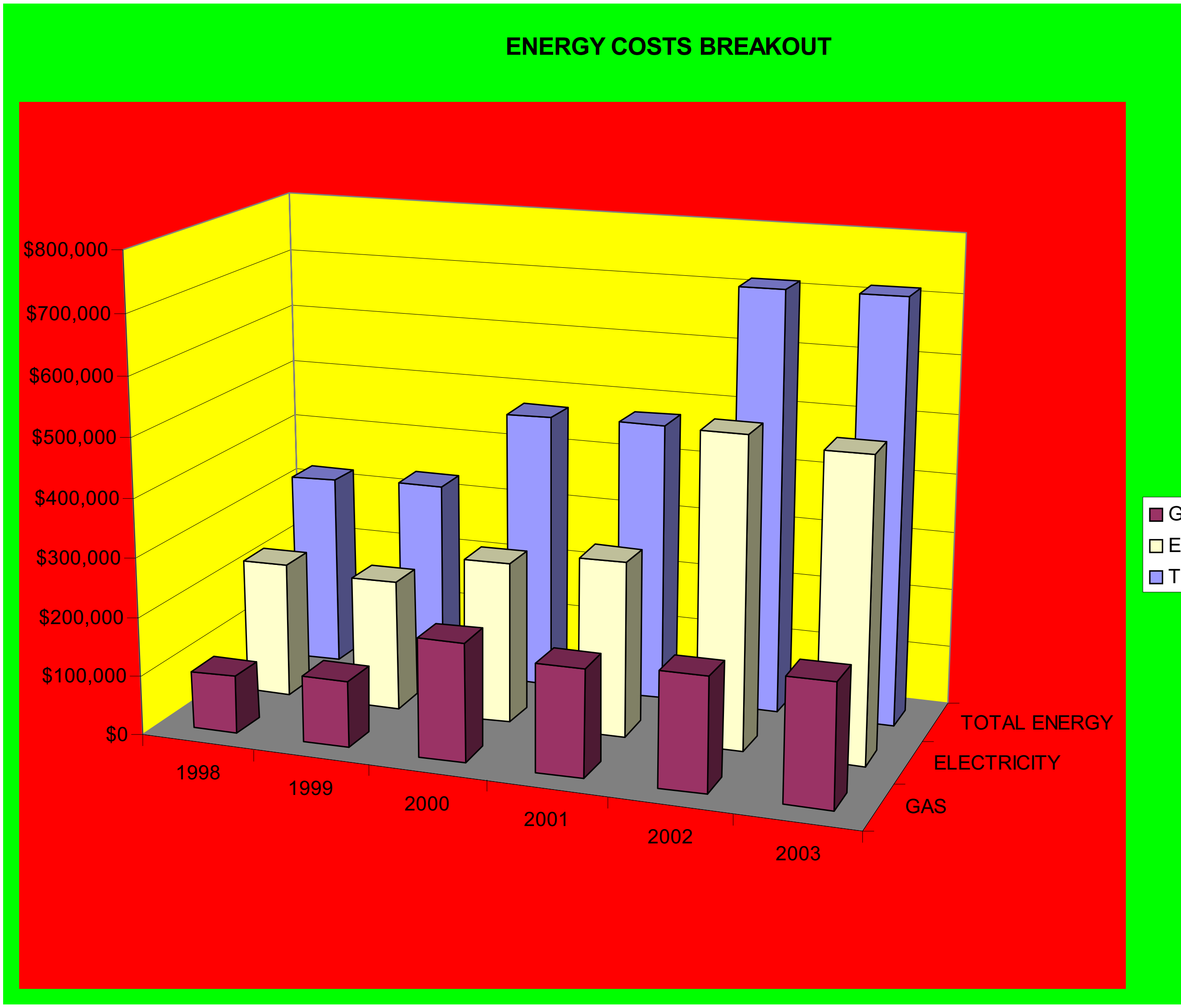
Energy
Labor

Appendix F: Energy Cost Breakout



Appendix G: Facility Labor Cost Increases