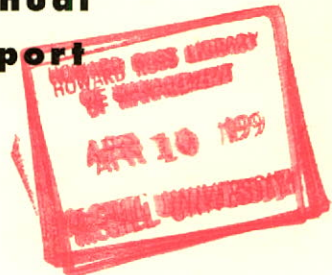


**1990
Annual
Report**



Adapting to change

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Corporate mission

To satisfy customers with safe, environmentally responsible, reliable electric service at the lowest possible cost.

Corporate profile

TransAlta Utilities Corporation is the largest investor-owned electric utility in Canada. Since 1911 TransAlta has provided safe, reliable electric service to Albertans. Today, more than 632,000 customers rely on the corporation for electric service.

The principal subsidiary of TransAlta Utilities is TransAlta Resources Corporation, which holds investments in non-regulated activities including TransAlta Technologies, Inc. and TransAlta Energy Systems Corporation. Other subsidiaries include TransAlta Fly Ash Ltd., Kanelk Transmission Company Limited, and Farm Electric Services Ltd.

For more information

TransAlta offers additional financial information through the following publications:

- Management Discussion and Analysis
- Financial Statistical Summary
- Interim Reports to Shareholders

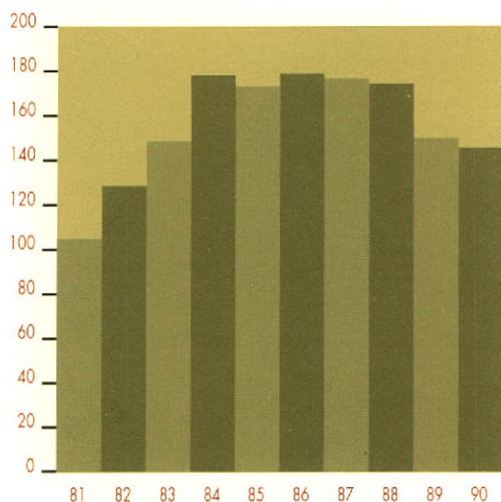
For copies, please write to:

Corporate Secretary
TransAlta Utilities Corporation
Box 1900
Calgary, Alberta T2P 2M1
Telephone (403) 267-7301
Fax (403) 267-7372

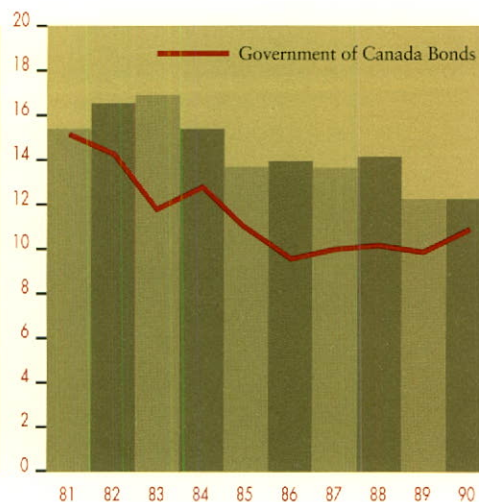
Shareholders' meeting

Shareholders are invited to attend the Annual Meeting to be held at 10:00 a.m. on May 10, 1991 at the Westin Hotel, 4th Avenue and 3rd Street S.W., Calgary, Alberta.

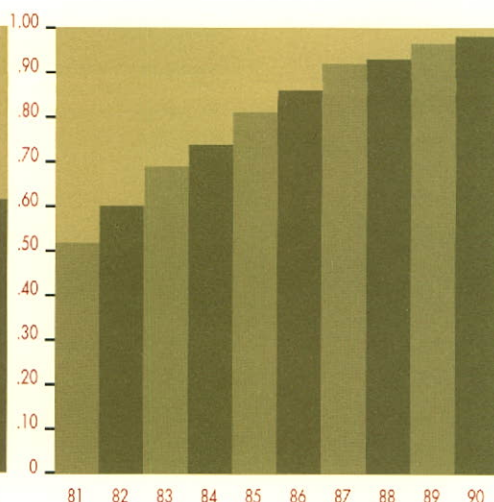
FINANCIAL HIGHLIGHTS



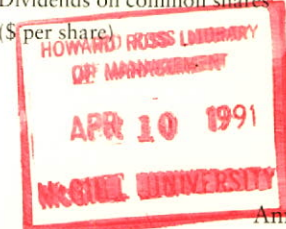
Earnings from continuing operations
(\$ millions)



Return on common shareholders' investment
compared with long-term Canada bond rates
(percentage)



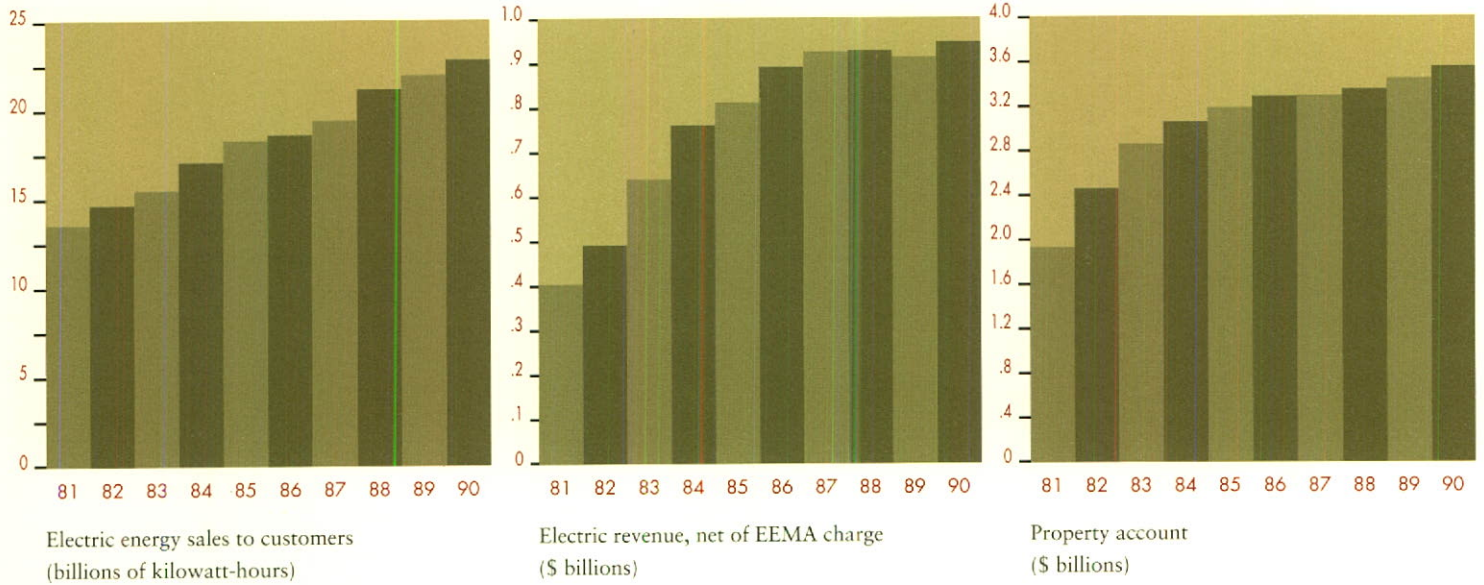
Dividends on common shares
(\$ per share)



(in millions except per common share data)

	1990	1989	Per cent Annual Growth 1981-90
Electric revenue, net of Alberta Electric Energy Marketing Agency (EEMA) charge	\$ 946.0	\$ 911.6	9.9
Operating deductions	620.3	588.3	10.3
Allowance for funds used	45.9	40.7	-
Earnings before financing charges	373.7	366.0	6.6
Earnings from continuing operations	145.3	150.0	5.4
Capitalization	3,293.7	3,223.7	6.4
Common shareholders' equity	1,155.8	1,230.6	6.1
Return on common shareholders' investment (per cent)	12.2	12.2	(2.4)
<i>Per common share data</i>			
Earnings - from continuing operations	\$ 1.07	\$ 1.11	0.9
- net earnings per share	0.26	1.01	(7.2)
Dividends declared	0.98	0.965	7.4
Book value (year end)	8.42	9.10	2.4

OPERATING HIGHLIGHTS



	1990	1989	Per cent Annual Growth 1981-90
Electric energy sales (millions of kilowatt-hours)	22,786	21,942	5.9
Generating capability (megawatts)	4,476	4,293	3.2
Customers (thousands)	632.9	618.2	1.7
Employee positions	2,633	2,542	0.4
Cash from operations (\$ millions)	152.9	177.6	9.0
Additions to property (\$ millions)	280.9	293.4	(5.8)
Property account (\$ millions)	3,538.7	3,451.7	6.9

Earnings per share from continuing operations decreased to \$1.07 per share from \$1.11 in 1989, largely due to an unfavorable regulatory decision, lower-than-anticipated load growth and increased financing costs.

Dividends declared on common shares were \$0.98 per share, compared with \$0.965 per share in 1989.

Energy sales increased to 22,786 million kilowatt-hours, up 3.8 per cent from 1989. Electric revenues increased to \$1,063.5 million, up from \$954.9 million in 1989. After deducting for a higher Alberta Electric Energy Marketing Agency (EEMA) charge, electric revenues were \$946.0 million in 1990, compared with \$911.6 million in 1989.

The investment in Canada Northwest Energy, an international oil and gas exploration and production company, and the building automation operations of TransAlta Energy Systems, were no longer considered compatible with the company's long-term strategic direction. We intend to sell or otherwise deal with the investment in Canada Northwest Energy and discontinued the building automation operations. The loss from these discontinued operations was \$0.81 per share in 1990.

Despite the discontinued operations, the year was one of significant achievements:

- Contracts were completed for two cogeneration power projects in Ontario.
- Unit 2 of the Sheerness Plant was commissioned.
- System load factor was among the highest in Canada and the United States.

- A statement of intent was signed with B.C. Hydro to increase co-ordinated operations.
- Environmental commitment and action were increased.
- Energy efficiency was enhanced by a new customer incentive program.
- Customer satisfaction ratings reached a record high.

The regulatory process – a difficult challenge As noted in last year's annual report, the Public Utilities Board allowed a rate of return on common equity of 13.5 per cent for 1988, 1989 and 1990 – not 14.5 per cent, which was more appropriate, given financial market circumstances. The adverse effects of this lower rate of return were intensified by the Board's decision to exclude unit 2 of the Sheerness Plant from rate base in 1990. The decision has increased the investment risk posed by large generation projects, further emphasizing the need to consider smaller, shorter lead-time projects which cost less to build but more to operate.

An already difficult situation was complicated when energy sales fell short of the forecast made in early 1989 and used by the Board as the basis of approved rates in 1990. To offset reduced revenues and increased financing costs forecast for 1990, TransAlta asked for a review and variance to adjust the Board's decision for 1990, which was denied.

Costs under our control were significantly reduced by extraordinary effort by our employees. In respect of costs beyond our control, we applied to the Board for a refund of the 1989 adjustment to EEMA costs, the recovery of 1990 EEMA costs not covered by rates and the recovery of the 1991 increase in EEMA costs. The Board approved the refund of the 1989

adjustment and the recovery of a major part of the 1991 costs but denied the recovery of 1990 costs in the absence of a general rate application. Such an application has been filed for that year.

To strengthen our financial position, the Dividend Reinvestment and Share Purchase Plan was modified with the October 1, 1990 dividend. A 5 per cent discount from a five-day weighted average market price was reintroduced for the purchase of common shares issued from treasury and acquired through the reinvestment of cash dividends. A total of \$41.8 million in common equity financing was raised through the plan, largely from the October 1, 1990 and January 1, 1991 dividends.

A weakened financial condition arising from regulatory decisions led to lower credit ratings for TransAlta's debt securities. The Dominion Bond Rating Service lowered credit ratings on first mortgage bonds from AA (High) to AA in 1990 but continued to rate secured debentures at AA since TransAlta indicated that it will no longer issue additional first mortgage bonds. The Canadian Bond Rating Service lowered credit ratings on outstanding first mortgage bonds and secured debentures from A++ and A+ to A+ (High) and A+ (Low) respectively in 1990. In explaining the decision, CBRS said: "The rating revision reflects weakening debt coverage ratios over the past two years, resulting from lower utility ROE (return on common equity), higher debt levels and to other regulatory decisions."

From left: Ken McCready, President and Chief Executive Officer; Marshall Williams, Chairman of the Board; and Harry Schaefer, Deputy Chairman of the Board and Chief Financial Officer.



TransAlta adapted to change by taking important steps in 1990 to prepare for future growth.

Canada Northwest Energy Since 1981, we have held an investment in Canada Northwest Energy. The investment is held by TransAlta Resources, our principal subsidiary, which is responsible for non-regulated investments. As previously noted, steps are being taken to sell or otherwise deal with this investment.

As a result, equity accounting for this investment was discontinued December 31, 1990. The carrying value in the investment was reduced to \$20.0 million, resulting in a recorded loss of \$77.5 million in 1990.

TransAlta focuses on cogeneration We determined that the future of TransAlta Energy Systems, a wholly owned subsidiary of TransAlta Resources, lay in cogeneration – not in building automation operations. The building automation operations were discontinued on June 30, 1990.

Since 1983, TransAlta Energy Systems has provided opportunities to explore new energy efficient technologies such as cogeneration. In 1990 this effort led to contracts for two cogeneration power projects in Ontario. The projects require some \$168 million in capital expenditures, will provide 178 megawatts of generating capacity and represent contracts having lifetime revenues of more than \$3.6 billion.

Cogeneration produces both electricity and useful heat simultaneously. The results are greater energy efficiency and reduced effect on the environment.

In a time of increasing environmental concerns and economic and regulatory uncertainty, cogeneration offers TransAlta opportunities for corporate growth. Taking advantage of our expertise in engineering, financing and operations, we plan to become a leader in Canada's cogeneration market.

We are investigating additional cogeneration projects, particularly in Ontario, British Columbia and Quebec. We have proposed the development of a 100-megawatt project with Alberta Natural Gas Company Ltd. in British Columbia. This project is being considered as a potential source of electricity by a U.S. utility customer.

Utility operations remain strong As we explored new areas of business, the core utility operations remained strong.

System load factor, a measure of operational efficiency, was 74.4 per cent, among the highest in Canada and the United States, where the utility average was 63.7 per cent. Other operational highlights included an all-time high peak load demand of 3,808 megawatts in December and the commissioning of unit 2 of the Sheerness Plant.

Looking to the future, the growth of TransAlta's core utility business will continue to reflect that of the Alberta economy. We expect the economy to be stronger than the national average in the early 1990s and more stable and diversified than in the past. Although the energy sector will remain the major economic force in the province, new growth will be more broadly based, generated by petrochemicals, pulp and paper, forestry, advanced technologies, tourism, and business services.

In the mid-1990s, TransAlta anticipates growth in Alberta's electrical load mainly from:

- the oil and gas sectors, which currently account for one-third of our energy sales. The mid-term outlook for natural gas volumes is positive. As pipeline expansions are approved, new markets will be opened for Alberta's natural gas.
- the chemical sector, including ethylene-based plants and new plants to supply the pulp and paper industry.
- the forestry industry, a potentially attractive market for TransAlta.

TransAlta remains confident that electricity will play an increasing role in the province's economic development. We also remain committed to keeping the cost of electricity low to attract new industries and to help Alberta to remain competitive in world markets.

While optimistic about Alberta's economic future, we are looking beyond provincial borders for business opportunities. Recognizing the potential benefits of co-ordinated planning and operations, we signed a statement of intent with B.C. Hydro to pursue these goals.

Through the 500-kilovolt transmission connection to British Columbia, TransAlta is able to position itself for future exports of surplus electricity and to reduce costs to customers. We expect utilities in the Pacific Northwest and California to purchase electricity to meet their load growth in the late 1990s.

Customer satisfaction rating reaches new high While we look to future opportunities beyond Alberta's borders, we continue to emphasize the importance of satisfying customers within our traditional service area.

In 1990 customers gave us our highest service rating ever. According to results of the independent public attitude survey, 92.5 per cent of customers rated TransAlta's service as "good or excellent," compared with 89 per cent in 1989.

These results help to confirm that the Quality of Service initiative continues to be successful. Begun in 1988, the initiative is designed to help us meet changing customer needs and to enhance our traditional value of service. In 1990 we sought to improve service, for example, through customer feedback, employee

training, and computer systems for billing information and service requests.

Using the year's results as a benchmark, we will seek further improvements to our customer service. We will endeavor to increase flexibility and responsiveness in serving customers. The resulting strategic gain from these improvements will be critical to all aspects of our business as we serve existing and future customers, develop new business opportunities through cogeneration and respond to environmental concerns.

Environmental commitment in action

Expanding our commitment to the environment, we asked an independent Environmental Advisory Panel as well as TransAlta employees to review environmental policies. The panel worked with management to draft a series of policy statements. Employees throughout the organization provided practical input and revisions leading to the policies listed on page 13 of this report. As a result of such involvement by the panel and employees,

we believe the policies reflect the needs of society and will be more easily understood and implemented by TransAlta's employees.

Another outcome of the review process was the amending of TransAlta's corporate mission statement to include the words "environmentally responsible."

It now reads:

"To satisfy customers with safe, *environmentally responsible*, reliable electric service at the lowest possible cost."

As part of our responsibility to the environment, we contributed to public consultation processes, such as the Government of Canada's *Green Plan: A Framework for Discussion on the Environment*. We took an active role in advocating a policy framework that encourages the use of economic incentives to achieve environmental objectives. TransAlta supports economic incentives in preference to traditional command and control regulation. Incentives can provide flexible, cost-effective solutions to problems and reward excellence in environmental innovation and performance.

We sought ways to protect the environment through energy efficiency programs which promote the wise use of energy. We introduced a rebate program to encourage customers to install high-efficiency electric motors.

We pursued our commitment to the environment by continuing to research and develop clean coal burning technology. We own the Low NO_x SO_x Burner technology, which promises to significantly reduce the emissions of oxides of nitrogen (NO_x) and sulphur dioxide (SO₂). This technology is being tested through two commercial-scale demonstration projects: The first project is in the commissioning test phase at Cold Lake, while the second project is under construction at Marion, Illinois.

Strategy for the 1990s TransAlta's diverse achievements in 1990 reflect a strategy for the decade which focuses on:

- satisfying customers with quality service
- developing energy resources in an environmentally sensitive, cost-effective manner
- pursuing business opportunities in energy conservation through technological developments
- developing non-regulated opportunities in electrical generation
- participating in research and development related to the control of atmospheric emissions from the combustion of coal.

While not without difficulties, 1990 was a year of achievement. We completed contracts for two cogeneration projects, as part of our intention to become a leader in this market. Core operations remained strong with highly efficient use of generating facilities. A new record in customer satisfaction ratings was established. We stepped up our commitment to the environment. As a result, TransAlta is well positioned for the challenges ahead.

In accordance with our strategy, we will continue to build on the historical base of operations in Alberta and seek new business opportunities in Canada and beyond for generating electrical and thermal energy. While adapting the corporation's utility operations to a changing regulatory climate, we will pursue fair treatment and return from these operations. We will actively participate in endeavors to develop investments in non-regulated generation projects. Our stated purpose is to provide energy that is safe, reliable, environmentally responsible and at the lowest possible cost. We are confident that pursuit of this strategy will benefit customers and contribute to future earnings.

Changes in senior management responsibilities Ken McCreedy was appointed President and Chief Executive Officer, TransAlta Resources. He continues to perform the same responsibilities for TransAlta Utilities.

Harry Schaefer was appointed Chairman of the Board and Chief Financial Officer for TransAlta Resources. He continues his duties as Deputy Chairman and Chief Financial Officer for TransAlta Utilities.

Walter Nieboer was appointed Senior Vice-President, Operations for TransAlta Resources. Mr. Nieboer will oversee operation and development of non-regulated businesses.

Walter Saponja was appointed Senior Vice-President, Operations for TransAlta Utilities, with responsibility for the regulated business groups of Generation, Transmission and Customer Services.

Also appointed were Rick Winsor as Vice-President, TransAlta Resources; Wolfgang Janke as Vice-President, Customer Services; Murray Nelson as Vice-President, Transmission; and John Tapics as Vice-President, Generation.

These changes were made to integrate the talents of our people in both regulated and non-regulated operations.

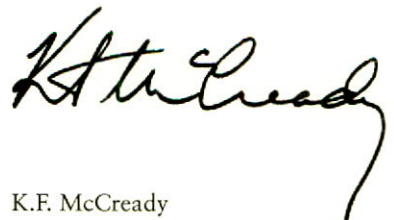
Our people – a key to success The Board of Directors wishes to thank employees for their dedication in helping the company in its efforts to adapt successfully to change. In particular, we greatly appreciate contributions made in providing customers with excellent service, protecting the environment and helping to strengthen TransAlta.

We also thank members of our Northern and Southern Alberta Advisory Boards and our Environmental Advisory Panel for their contributions during the year.

On behalf of the Board of Directors, we are pleased to submit this report.



M.M. Williams
Chairman of the Board



K.F. McCreedy
President and Chief Executive Officer

February 8, 1991

What were the most significant factors in 1990?

McCready: It became even more apparent that expectations of TransAlta on the part of customers and the public continued to change rapidly. At the same time, shareholders expected TransAlta to develop opportunities for corporate growth.

1990 was a year of adapting to these expectations while building on our corporate strengths of service, productivity and environmental performance. With a strong focus on satisfying customers, our Quality of Service initiative made fresh gains. Our commitment to improving environmental performance advanced, thanks in part to the active involvement of employees. And our pursuit of new growth opportunities in non-regulated power generation resulted in the signing of contractual arrangements for two significant cogeneration projects in Ontario.

You mentioned cogeneration. Is this new for the company?

McCready: We've been pursuing this form of business for some time. We believe that independent power production projects such as these have the potential of being the way of tomorrow, carrying on our basic generation business in a new form.

Could you elaborate?

Schaefer: Back in 1978, we worked to develop the financing and contractual arrangements for a major cogeneration plant, which supplies electricity and steam to the Syncrude Project in northern Alberta.

Nieboer: Then in 1983 we formed TransAlta Energy Systems to develop non-regulated business opportunities relating to energy management. And while we've left the building automation



*Ken
McCready,
President
and Chief
Executive
Officer*

side, it was through TransAlta Energy Systems that we've gained a foothold in the cogeneration business outside Alberta.

Why is TransAlta interested in business opportunities such as cogeneration?

Schaefer: It's our view the electric utility business is changing as some generation is developed independently of the integrated electric utility. Attractive opportunities for independent non-regulated generation of electricity are emerging in various areas of the country.

Nieboer: We're also interested because cogeneration has a higher energy efficiency and therefore is environmentally attractive.

Will TransAlta's utility background be an advantage in the cogeneration market?

Nieboer: We have 80 years of engineering and operating experience with generating plants. So we know how to optimize the technical and operational aspects of power plants.

Saponja: And because we're a utility ourselves, we know what's necessary to create satisfactory business relationships and contracts with electric utilities – the purchasers of electricity generated by independent power projects.

What is special about the development of cogeneration contracts?

Schaefer: Independent power projects like cogeneration require a complex set of

business arrangements. Putting together these arrangements can be a tough, long process. The process is worth it, because when it's done well it can provide superior service to customers and a fair return to investors. The business arrangements replace regulation and establish the business regime for the life of the project.

Let's turn to satisfying customer expectations. Why is this important to TransAlta?

McCready: To put it simply, satisfying customer expectations is really the hallmark of a successful business.

Leslie: Customer service has always been important at TransAlta. In the last couple of years, it has become still more focused with emphasis on customer satisfaction.



*Walter
Nieboer,
Senior Vice-
President
Operations
for TransAlta
Resources*

How is TransAlta meeting customer expectations?

Leslie: Through the Quality of Service initiative, we're building and strengthening our business franchise with existing customers and establishing strong relationships with new customers as we widen the boundaries of our business. We're looking at business processes to determine how they can be done with greater flexibility, with quicker delivery, at minimal cost, and through our long-term strategic relationships with suppliers and contractors.

Saponja: We're also empowering our employees on the frontlines to take more individual responsibility and respond to customer needs more quickly.

Is there a tradeoff between customer service and productivity improvements?

Leslie: No. What has been outstanding about the Quality of Service initiative, as far as I'm concerned, is we're making gains in customer service and productivity simultaneously.



*Walter Saponja,
Senior Vice-
President
Operations
for TransAlta
Utilities*

You mentioned the environment as a key factor for TransAlta. What did TransAlta do in 1990 that was new?

McCready: To ensure we understood increasing public expectations on the environment, we involved an independent advisory panel of Albertans. This group challenged us to step back and take a fresh look at our environmental practices and policies.

Were employees involved in this process?

Saponja: They made an important contribution through focus groups which reviewed the environmental policy statements developed by the panel.

What were the results?

Saponja: We set out in more formal terms the elements of good environmental practice, reaching for improvements. We created what I believe are strong,



*Harry Schaefer,
Deputy
Chairman
and Chief
Financial
Officer*

workable and forward-looking policy statements. Moreover, employees feel responsible for the statements and are committed to implementing them.

What is TransAlta's long-term strategy on the environment?

McCready: Very simply, we're making the environment as important as safety, cost and quality of service in our decision-making. In addition, it will continue to be a key responsibility of our employees.

Is the environment a factor in planning for future electricity needs?

Schaefer: Yes. Greater emphasis on the wise use of energy and environmentally conscious planning are hallmarks of the future. Demand-side strategies, which seek to minimize customer demand for electricity and reduce the utility's impact on the environment, are important.

Are there other factors?

Nieboer: There's a need to consider more uncertainty in load forecasts and a shift in the regulatory climate.

Leslie: We must consider smaller plant additions because of the risks of undertaking large capital investments with long lead times, especially in times of lower, less predictable load growth.

What will help the utility to manage these changes?

Schaefer: There should be more regulatory incentives which help the utility to pursue environmental and demand-side goals and reward excellent performance. Electric revenue adjustment mechanisms, now being considered in the U.S., may be useful.

Saponja: Through our own planning process, we intend to seek input from stakeholders to supplement the normal economic and business risk considerations when making resource option decisions. Our objective is to match supply to demand, while taking into account environmental factors, cost and the need to avoid placing undue risk on investors.

Nieboer: And the planning must be ongoing. Only in that way can we be confident that we'll continually adapt to meet changing needs and expectations of our customers and society.

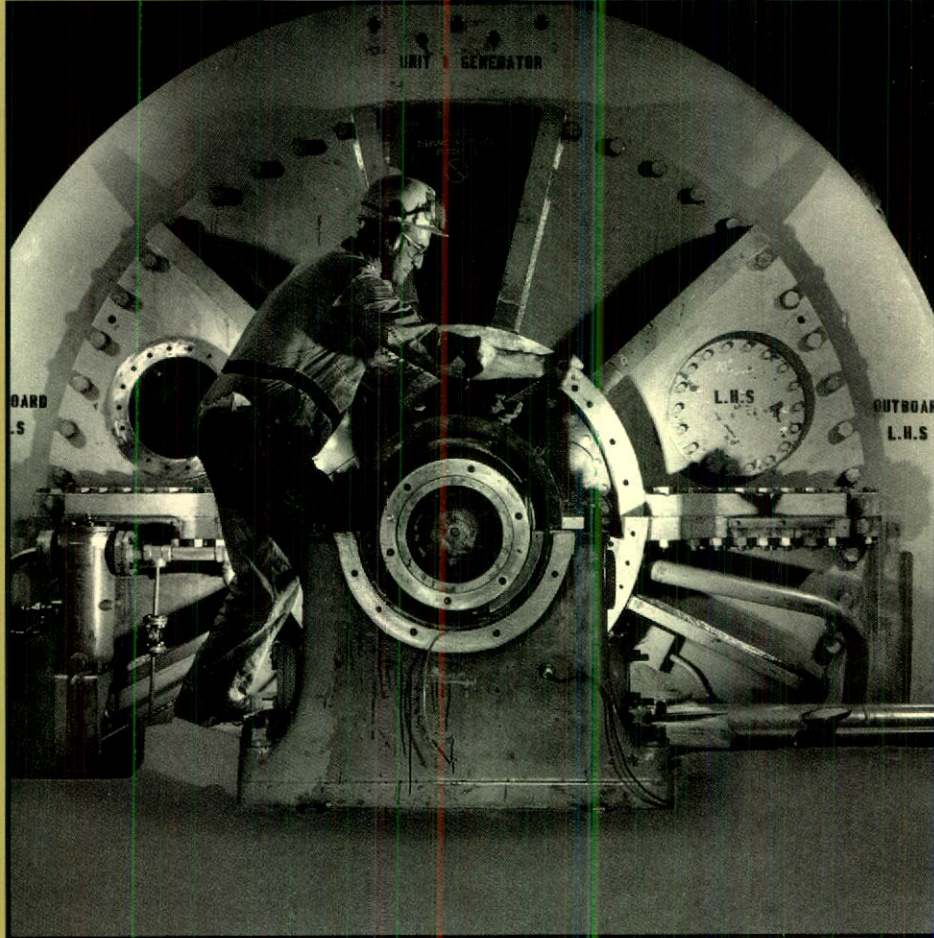


*Jim Leslie,
Senior Vice-
President
Corporate
Services*

In addition to power planning, how will TransAlta adapt to future expectations of stakeholders?

McCready: By pursuing fair treatment in our regulated business, developing non-regulated business opportunities, serving our customers well, achieving greater productivity and being prepared to adapt to the future. Meeting changing expectations calls for continuous improvements in quality, cost, safety and environmental performance. We have to improve in all of these areas at the same time – and all of the time.

The generation of electricity continues to be the core strength of TransAlta's business. An example in 1990 of TransAlta's on-going efforts to maintain the high productivity of its generating equipment was the preventive maintenance carried out at the Sundance Plant at Wabamun Lake.



Adapting to change in 1990, TransAlta built on the strength of its core business – the generation of electricity – and continued strong commitments to the environment and customer service.

THE YEAR IN REVIEW



Maintaining generation strength The core business remained strong as TransAlta generated a low-cost, reliable supply of electricity to meet growing electricity needs. The corporation continued to be the prime supplier of electric energy in Alberta, supplying 71.4 per cent of the total electricity used by utility customers in the province. Overall energy sales increased to 22,786 million kilowatt-hours, up 3.8 per cent from 1989. The system's load factor of 74.4 per cent was among the highest in Canada and the United States where the utility average was 63.7 per cent. In December an all-time high peak load demand of 3,808 megawatts was recorded.

The company's net generating capacity grew by 183 megawatts with the successful completion of unit 2 of the Sheerness Plant near Hanna. TransAlta and Alberta Power Ltd., which jointly own the plant, worked closely together for 11 years to design, construct and commission the unit.



TransAlta operates some of the most productive generating units in Canada, according to the Canadian Electrical Association's *1989 Annual Report - Generation Status Report*, which was released in 1990. Unit 1 at the Wabamun Plant placed first for Operating Factor and three other units at the Wabamun and Sundance thermal plants were ranked among the 10 most productive of 97 fossil fuel units in the report.

Maintaining a reputation for excellence in generation requires constant attention. A special team was formed to improve boiler performance in TransAlta's thermal plants. Using equipment such as ultrasonic devices to measure metal erosion in boiler tubing, this team helped to decrease the number of power outages caused by boiler leaks.



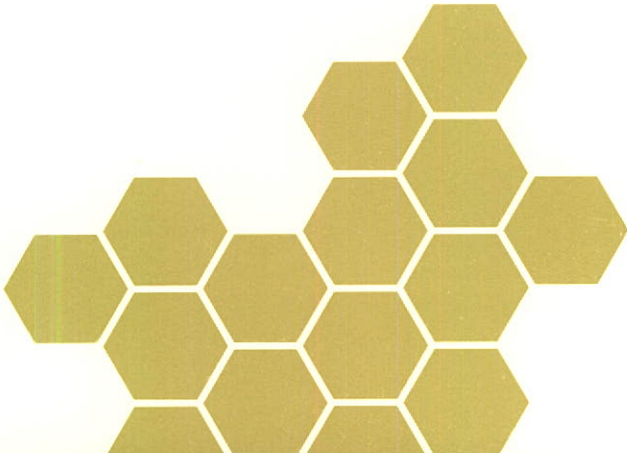
Delivering the product To ensure that electric power moves from the generating plants to customers as reliably and cost-effectively as possible, transmission and distribution facilities were added or improved.

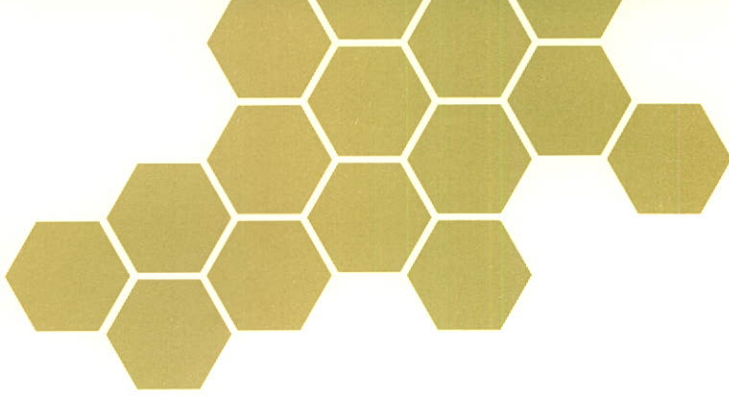
TransAlta constructed a 26-kilometre, 240-kilovolt line as part of a \$12-million transmission system to serve Alberta Newsprint Company Ltd. near Whitecourt.

A \$7.6-million transmission system between the Ellerslie and East Edmonton substations increased the corporation's capacity to serve growing electricity needs in the area north and east of Edmonton. The 240-kilovolt line was built along an existing transmission right-of-way to minimize visual impact and construction costs.

A \$3.9-million substation was completed at Seebe, west of Calgary. By replacing a 42-year-old substation, the reliability of the Bow Hydro System and local distribution facilities was improved.

Since the mid-1960s, TransAlta has restored mined land to productive use, including agriculture, recreation and wildlife habitats. As a public service, TransAlta allows professional beekeeping on reclaimed pasture land rich with clover and alfalfa.





ENVIRONMENTAL POLICY STATEMENTS

Controlling fuel costs TransAlta's reputation as one of the lowest cost producers of electricity in Canada and the United States remains unchanged due to large reserves of inexpensive coal and efficient mining methods.

At the Highvale and Whitewood mines near Wabamun Lake, TransAlta owns or controls an estimated 625 million tonnes of coal reserves – enough to fuel the existing three thermal generating plants in the Wabamun area for 42 years. Contractors mine and deliver coal to these plants under five-year contracts.

New contracts with Manalta Coal Ltd. and Fording Coal Limited were completed for 1991 to 1995. The contracts include incentives which promote efficient operations and help TransAlta and the contractors to control costs and increase productivity.

Under the new contracts, Manalta will operate the Highvale Mine, which produced 11.9 million tonnes of coal in 1990. Fording will operate the Whitewood Mine, which produced 2.8 million tonnes.

Continuing a strong commitment to the environment Beginning with land reclamation at the Whitewood Mine in the mid-1960s, protection of the environment has long been an important commitment for TransAlta. In 1990 this commitment was recognized by the Alberta Chamber of Resources' "Ammonite" Reclamation Award, presented annually to a company which has shown exemplary dedication and success in land reclamation.

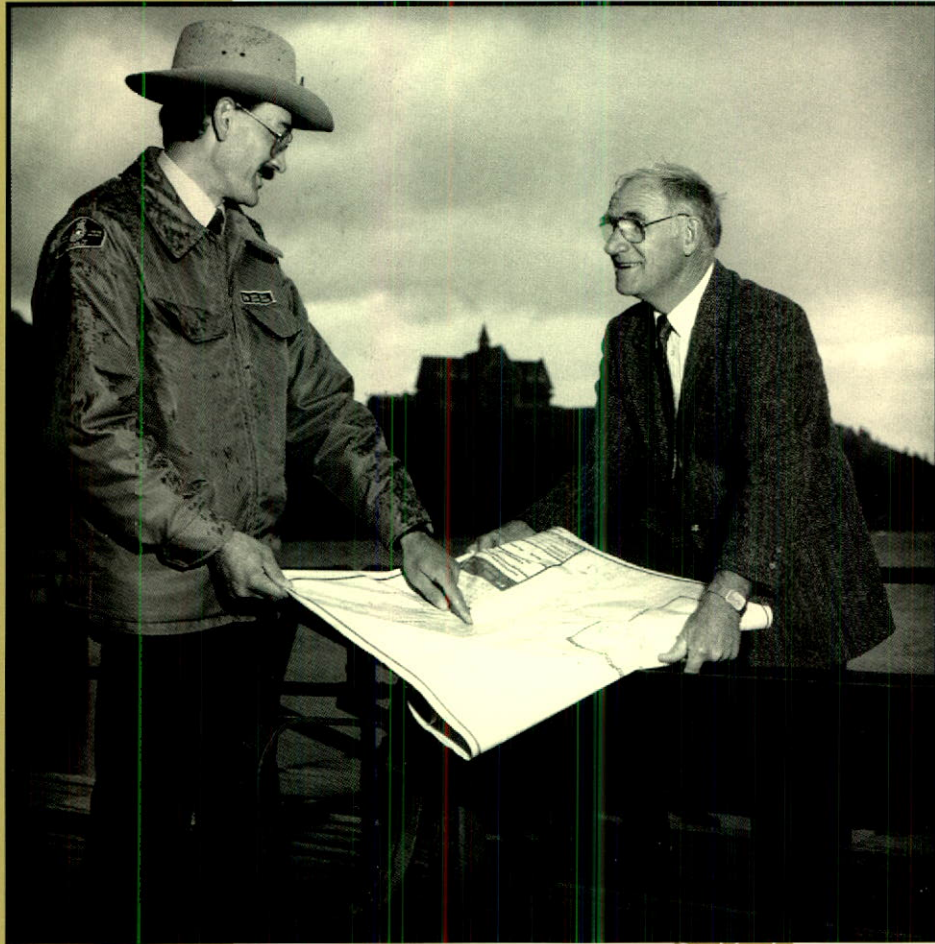
The chamber, an industry association which promotes the orderly development of Canada's minerals, cited land reclamation at the Whitewood Mine, saying: "TransAlta has succeeded in integrating the efforts of engineers, soil scientists, biologists and land managers into its reclamation planning. Good field level supervision ensures proper implementation of plans. In addition, TransAlta has maintained open communication with the government and the public. TransAlta and its staff are to be commended for their commitment and dedication to reclamation in Alberta."

An outstanding example of reclamation at the Whitewood Mine has been the East Pit Lake. The lake replaces two shallow bodies of water, which were drained to allow for mining activities. Working closely with the provincial government, TransAlta has spent \$2.2 million since 1987 to transform 125 hectares of mined land into a recreational resource, which also provides a habitat for geese, ducks, loons, deer and other wildlife. Plans are now under way to transfer ownership of the site to the Province of Alberta for public use.

TransAlta is committed to the environment and sustainable development. Protection of the environment is a vital element in our business. We strive to empower our employees to take initiatives to protect and enhance the environment, based on shared values and the need to satisfy the environmental concerns and expectations of customers, investors and the public. We are committed to:

- reporting complete and accurate information to stakeholders on the environmental impact of our business, meeting or surpassing all environmental standards, and to continuously improving our environmental performance.
- advocating socially responsible environmental standards and the recognition of the economic value of environmental resources.
- implementing conservation and efficiency initiatives for all resources and pursuing alternative energy opportunities, both within our own operations and in partnership with others.
- seeking out research opportunities and developing alliances with stakeholders for environmental solutions.
- consulting and working with those who may be affected by our business to respond to their concerns.
- recognizing and respecting the relationship between the environment and health in all phases of our business, and using the best knowledge available to protect the health of employees and the public.
- encouraging and developing educational programs and resources to provide balanced public information and to foster environmentally sensitive attitudes, knowledge and skills.
- identifying and developing business ventures where value can be added to solutions to environmental problems and investment opportunities created for the corporation and its shareholders.

TransAlta's Quality of Service initiative emphasizes the importance of satisfying the special requirements of customers. To replace a transmission line in the back country of Waterton Lakes National Park, TransAlta worked closely with park officials to successfully locate the line without disturbing an existing osprey nest and the breeding grounds of a large elk herd.





EMPHASIZING PUBLIC PARTICIPATION

Together, as individuals and as a company, we seek to contribute to two major goals – the protection of the environment and the building of a strong economy. An example of individual involvement is the role of Ken McCready, TransAlta's President and Chief Executive Officer, as Chairman of the Alberta Round Table on Environment and Economy. Appointed in 1990 by the Province of Alberta, Mr. McCready is working with a diverse group of citizens to advise the provincial government on strategies for sustainable development.

In discussing environmental strategies, TransAlta worked closely with various stakeholders. Environmental policy statements were created with the help of TransAlta employees and an Environmental Advisory Panel. The panel, established in 1989, represents a wide cross-section of Albertans and provides input on environmental issues involving the corporation's business.

TransAlta participated fully in consultations to develop the Government of Canada's plan for controlling oxides of nitrogen (NO_x) and volatile organic compounds (VOCs). The company took an active role in policy discussions for the Province of Alberta's proposed Alberta Environmental Protection and Enhancement Legislation as well as the federal government's Green Plan. In each case, TransAlta advocated the use of economic incentives to achieve environmental objectives.

The corporation contributed to public awareness of environmental issues by sponsoring a series of lectures entitled *The Living Planet* at the Alberta Science Centre in Calgary, the Space and Science Centre in Edmonton, and the H.R. MacMillan Planetarium in Vancouver. Scientists and public policy makers spoke on the role of science and technology in discovering and predicting changes to the environment.

Within TransAlta's operations, environmental performance continued to be monitored to maintain high standards. Environmental audits were carried out by independent consultants at the Keepphills, Brazeau, Bears paw and Cascade generating plants. These provided a management tool for environmental protection as well as an objective test of compliance with government and corporate requirements. The audits confirmed that the corporation is meeting or exceeding government standards.

Along distribution lines, the use of 2,4-D was reduced by substituting Garlon™, an environmentally effective herbicide. Vouchers were offered to customers to replace trees that interfere with power lines. This program will help to benefit the environment and reduce tree trimming costs by encouraging the planting of more compatible trees.

On their own initiative, employees set up environmental teams in the thermal plants. Their achievements included developing new ways to recycle byproducts, dispose of hazardous wastes and increase environmental awareness.

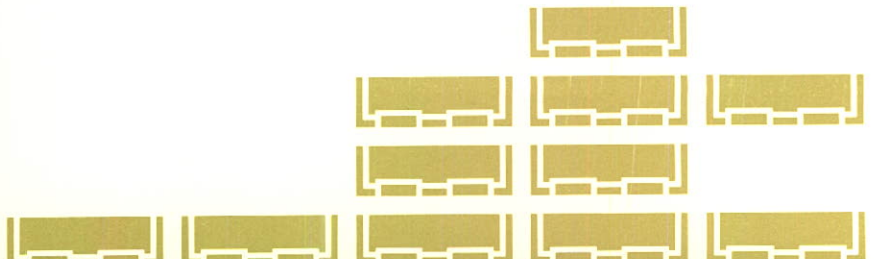
Employees at different work sites collected 40,000 kilograms of paper for recycling – saving the equivalent of about 750 trees. Much of this material was used by a commercial paper manufacturer to produce cereal boxes and other packaging.

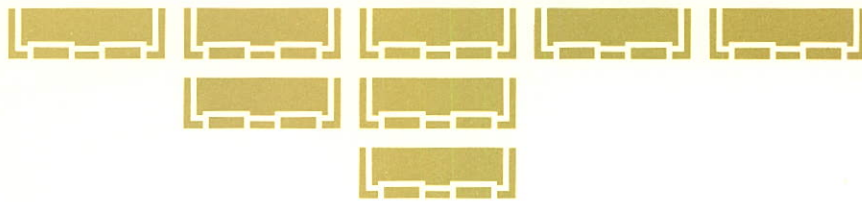
When TransAlta realized the need for a stronger transmission link to a natural gas plant near Cochrane, the company asked local residents to participate in planning the route.

TransAlta mailed out information and maps to landowners and invited them to public meetings to discuss the project. Landowners identified specific site concerns and helped the company to evaluate different options. In the end, TransAlta selected an alternative, preferred by the public, as the route to be submitted to the Energy Resources Conservation Board for approval.

The process of talking to landowners, listening to their concerns and providing on-going communication is a part of the corporation's commitment to customer service. Based on encouraging results, this process was used for three other transmission projects.

At the Acheson Service Centre near Edmonton, a computer-directed crane stores and retrieves inventory, improving warehouse productivity and service to customers. The centre handles materials for building and repairing TransAlta facilities north of Red Deer.





Creating customer satisfaction Satisfying customers is the driving force behind TransAlta's Quality of Service initiative. Begun in 1988, the initiative is designed to help TransAlta manage change by responding quickly to customer needs and by providing more choices in service. The introduction of new programs and technological innovations resulted in further improvements to service.

Employees were provided with the capability of providing service estimates and settling small customer damage claims on the spot.

When customers said price quotations for new services took too long, TransAlta developed a computerized form-driven system to provide most quotations in a day, instead of weeks. During the first full year of use, the system saved the corporation more than \$300,000 in design and engineering costs while providing customers with improved service.

The ability of employees to provide quick answers to customer billing inquiries was improved by the Customer Utility Billing and Information System. Accessed instantly from district and head offices, this computer system puts information at the fingertips of customer service staff, saves labor and in 1991 will offer customers the additional choices of budget billing and pre-authorized withdrawal service.

Strong efforts were made to build new partnerships with industrial and commercial customers. Opportunities for rate savings, credit options and more investment in customers' electric facilities were explored. Specific marketing representatives were designated for TransAlta's largest industrial customers and additional representatives were appointed for distribution customers.

To further improve service, feedback from customers was actively sought. A survey questionnaire was hung on customers' doors to solicit comments on tree trimming. A series of three-question surveys, called the One Minute Phone Call, asked customers for responses to service involving new installations, power outages and transmission lines. A computerized Customer Response Information System underwent a pilot test, logging inquiries from customers and documenting follow-up and results.

Company-wide involvement in the Quality of Service initiative continued to be encouraged through a series of training courses. A total of 773 employees took these courses and developed new skills in serving other employees or dealing effectively with customers. A new program, "Managing Extraordinary Service," was developed to assist management in planning and achieving improvements in customer service.

An important aspect of the training series has been the use of employees as trainers. Through their involvement, they have come to better understand how TransAlta is striving for further improvements. Following training, they are well able to promote Quality of Service within their working areas.

WHAT CUSTOMERS SAY

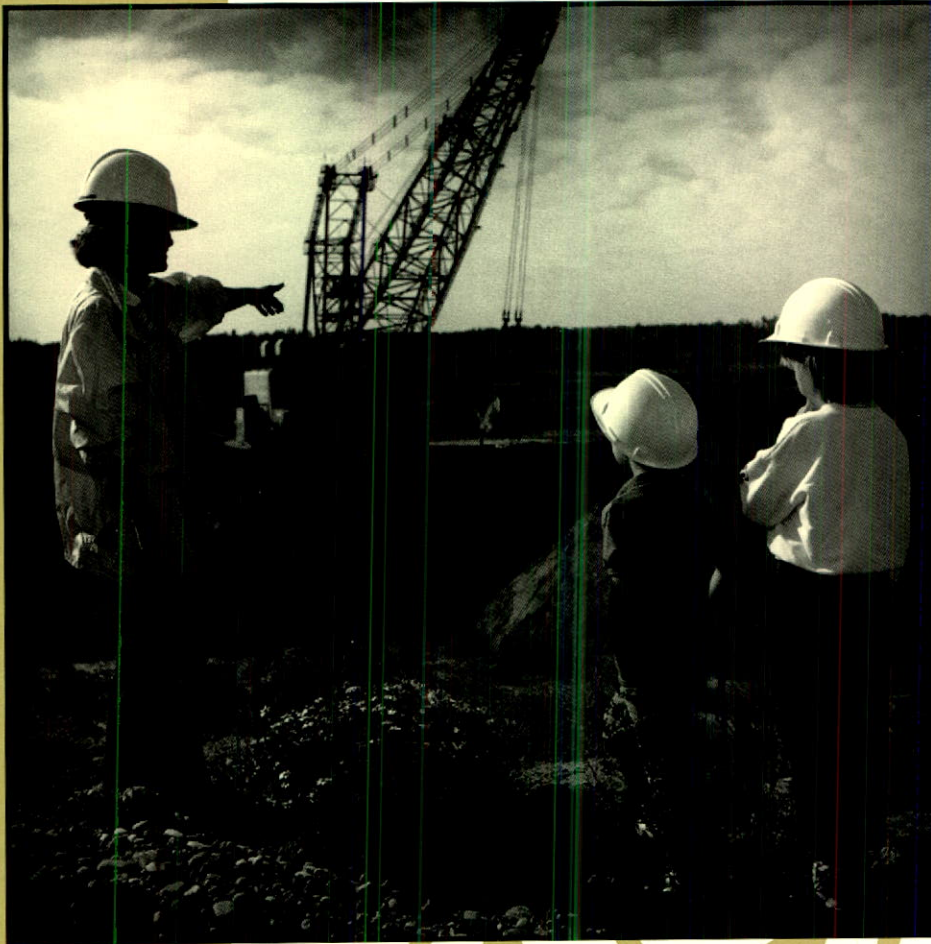
TransAlta's efforts to continually improve service are based on listening to customers and responding to their needs.

One way of listening is through an independent public attitude survey. Results of the 1990 survey, covering 900 direct customers throughout TransAlta's service area, show:

- More customers than ever say TransAlta provides good or excellent service. The overall quality of service was rated "good or excellent" by 92.5 per cent of customers, up from 89 per cent last year.
- Customers care most about the service they receive from TransAlta. When asked to rank a number of issues related to the company, 90 per cent mentioned the necessity of courteous, understanding employees, followed by 89 per cent who emphasized that electrical utilities should work hard to satisfy customers.
- TransAlta employees are considered courteous by 82 per cent of customers. The corporation is recognized as working hard to provide satisfying service by 77 per cent of customers. Although these results are encouraging, they reveal a difference between customer expectations and existing service, and challenge TransAlta to make continuous improvements.
- Reliable service is provided, according to 90 per cent of customers, while 85 per cent said electrical service is restored quickly.
- TransAlta's efforts to promote energy conservation were recognized, with 66 per cent saying good information was provided on how to use electricity economically and efficiently.

As the survey results show, customers give good marks for service but remind TransAlta that there is always room for improvement. An on-going challenge will be to improve service until customers tell the company their needs are being fully met.

As TransAlta prepares for the electricity needs of tomorrow's customers, it continues to emphasize the importance of public education. At Wabamun Lake, the company provides information on its operations to the public through plant and mine tours, regular open houses and newsletters.



New technology and facilities complement service

TransAlta's ability to locate the source of power outages, notify customers and make repairs was improved through enhancements to the Automated Mapping and Facilities Management System. This system supports the Quality of Service initiative by providing easy access to service maps and customer information as well as more accurate construction prints. Designing new distribution lines will be quicker as engineers are now able to make changes and calculations instantly on the system.

The year saw the official opening of the Acheson Service Centre near Edmonton. This facility has improved the supply of materials for building and maintaining service to customers. A feature of the new facility is a computer-directed crane which stores and retrieves inventory. The centre provides the transformers, insulators and other materials required for transmission lines and service facilities north of Red Deer.

Maintaining a safe working environment

TransAlta believes that safety is important to good customer service and a good working environment. More than 100 safety awareness presentations were made

to assist industrial customers and their employees in developing safe work habits near electricity lines and equipment.

The corporation continued to seek ways to improve safety by testing new methods of protective grounding for power lines and providing linemen with the most up-to-date work procedures. Training programs in substation operations and transmission line work were added to the more than 40 programs routinely scheduled for employees at the Trades Training Centre at Red Deer.

The Canadian Electrical Association recognized the corporation with the Safety Achievement Award for the third consecutive year. TransAlta won the award for reducing the frequency of lost-time accidents by 25 per cent or more compared to the previous three-year average. The company also recorded the lowest frequency of accidents involving vehicles, job injuries and lost-time injuries of a Canadian electric utility with 500 employees or more.

Gaining strength through people

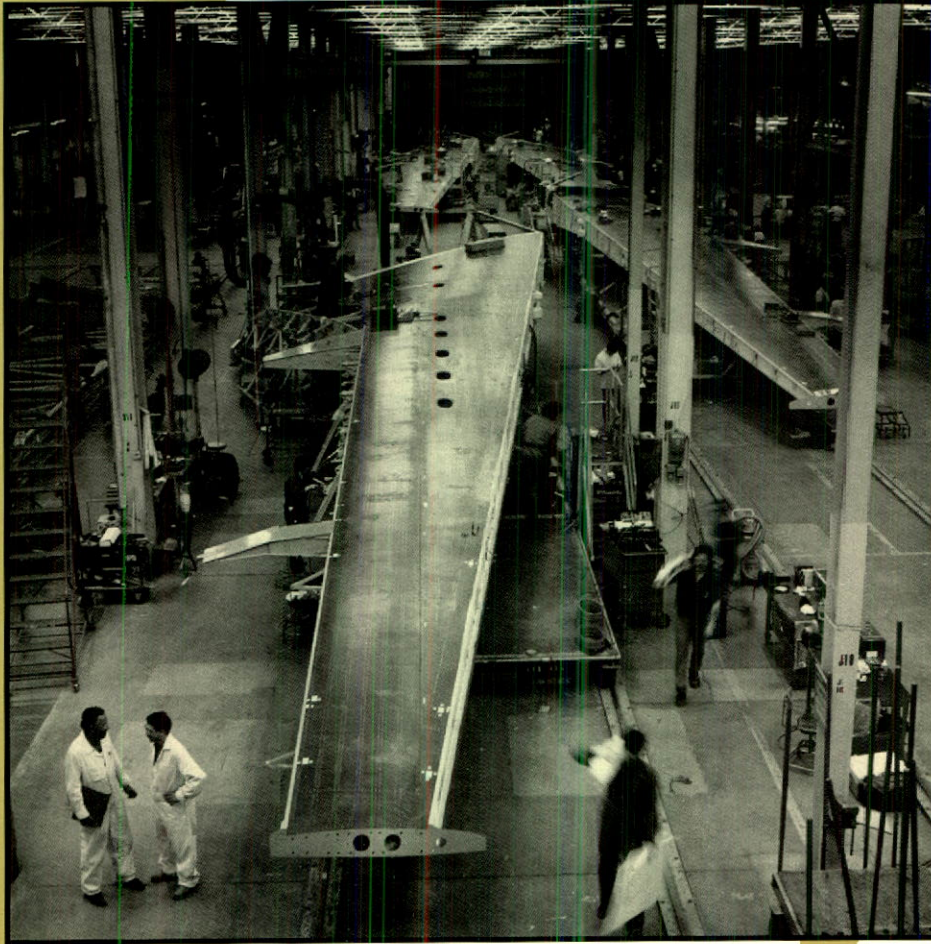
In 1989 TransAlta's first employee opinion survey was carried out. The results, published in 1990, show that employees are proud of their company and, in general, satisfied with their jobs. They view management favorably and clearly understand the goals of the company.

Although essentially good news, the survey revealed areas for improvement, including a need for more communication between employees and management. Departmental focus groups were set up to discuss the results and address areas for improvement.

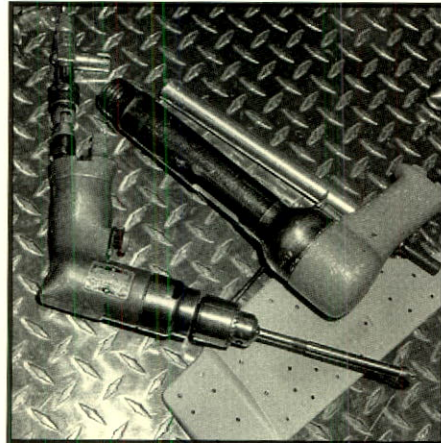
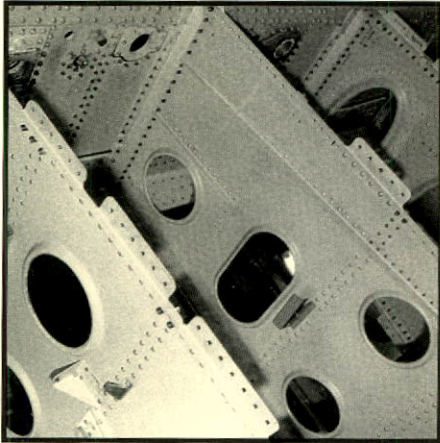
Through the Action Recommended Program, employees submitted 828 ideas on improving productivity and solving problems. Over 25 per cent were accepted, saving an estimated \$370,000 in operating costs and helping to contribute to safety and goodwill.

The corporation's goal for customer service reliability was met through the efforts of employees who participated in the Performance Recognition Program. The program is designed to improve corporate performance by rewarding employees with TransAlta shares for superior efforts.

Looking to the future, TransAlta plans to become a leader in Canada's independent power market. The company took an important step towards this goal with the signing of contracts for a \$100-million cogeneration plant at McDonnell Douglas Canada's airplane wing manufacturing facility in Mississauga, Ontario. The plant will provide thermal energy to the facility and electricity to Ontario Hydro.



Adapting to change requires the ability to see new trends as they emerge and to take action. In 1990 TransAlta acted by entering into business arrangements for cogeneration, exploring clean coal technologies and looking across borders for new opportunities.



Expanding into the cogeneration market

Seven years ago, with the formation of TransAlta Energy Systems, the corporation began to explore energy management opportunities resulting from changes in the electric utility industry. One of these opportunities is cogeneration, which produces both electricity and useful heat simultaneously.

This initiative resulted in the completion in 1990 of business arrangements for two cogeneration plants in Ontario. Both plants will begin operation in late 1992, generating electricity for sale to Ontario Hydro. A key component of the plants will be the General Electric LM6000 gas turbine, one of the most efficient turbines of its size. Natural gas from Alberta will fuel the plants.

TransAlta will construct, own and operate a 110-megawatt plant at McDonnell Douglas Canada Ltd. in Mississauga, Ontario. The \$100-million project will provide McDonnell Douglas' airplane wing manufacturing plant with heat as well as purified water, compressed air, waste water treatment and emergency

power. The project is expected to generate \$2.6 billion in revenue for TransAlta over 25 years.

Under a similar arrangement, TransAlta will construct, own and operate a 68-megawatt cogeneration plant at the Ottawa Health Sciences Centre (OHSC). The \$68-million project will supply heat and chilled water for air conditioning to the National Defence Medical Centre, the proposed Perley Hospital and members of the OHSC's organization, including the Children's Hospital of Eastern Ontario, the Ottawa General Hospital, the Ottawa Children's Treatment Centre and the Royal Ottawa Health Care Group. The project is expected to generate \$1 billion in revenue for TransAlta over two decades.

On the basis of TransAlta's cogeneration projects in Mississauga and Ottawa, the Ontario Ministry of Energy awarded the corporation an \$800,000 Technology Demonstration Grant for special excellence in technical innovation.

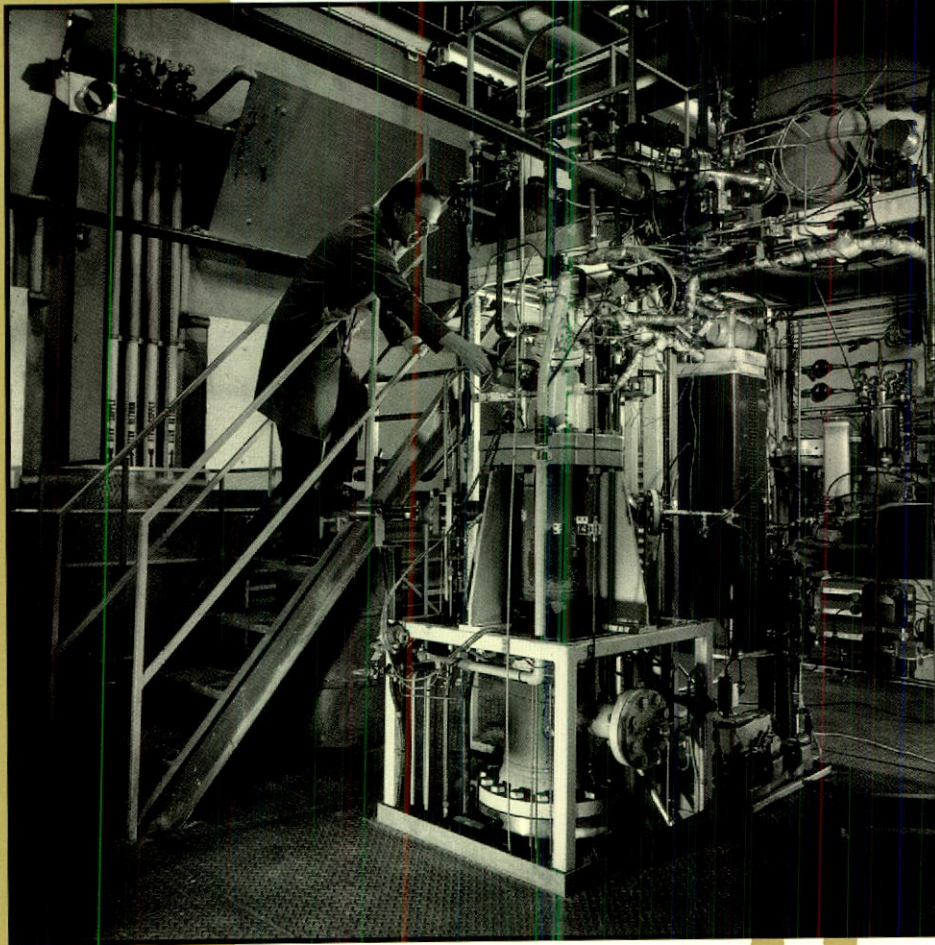
Although Ontario was TransAlta's most important cogeneration market in 1990, the corporation continues to explore business opportunities elsewhere. Plans have been proposed for a \$95-million cogeneration project with Alberta Natural Gas Company Ltd. Waste heat from exhaust

gases and natural gas will be used to generate 100 megawatts of electricity at a compressor station near Sparwood, British Columbia. TransAlta is actively exploring the potential for energy sales from the plant to British Columbia and the United States.

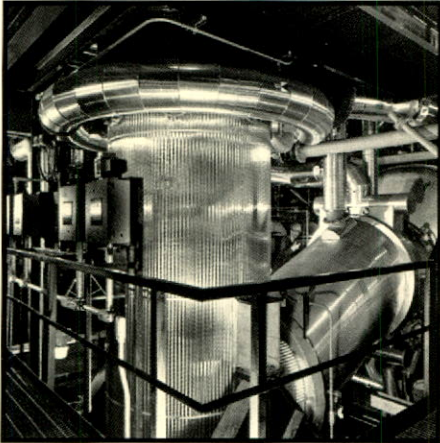
Researching ways to burn coal more cleanly As a major producer of coal-fired electricity, TransAlta actively promotes, funds and participates in the research and development of technologies for burning coal more cleanly.

TransAlta continued strong interest in Integrated Gasification Combined Cycle (IGCC) technology, which addresses the problems of acid rain and global warming. Working with the Coal Association of Canada, the corporation participated in a feasibility study to lay the groundwork for an IGCC plant in Western Canada. The \$1-million study will examine the costs, economic viability, expected performance and environmental benefits of the technology.

As part of its commitment to emerging technologies, TransAlta is participating in a coal gasification project at the federal government's CANMET research facility in Ottawa. The project will use coal from TransAlta and other sources to demonstrate a cleaner method of burning coal to supply energy.



TransAlta is helping to pioneer the Low NO_x SO_x Burner as a cost-effective way of controlling acid-rain producing emissions. The TransAlta-owned clean coal technology is currently being tested at Esso Resources Canada's oil recovery project at Cold Lake.



In IGCC technology, coal is converted in an oxygen-fired gasifier to a synthetic gas, mainly composed of carbon monoxide and hydrogen. Heat is recovered from the hot gas, and sulphur and other impurities are removed. Then the clean gas is burned in a gas turbine to drive a generator. The waste heat recovered from the gas turbine exhaust, together with that recovered during the cooling of hot gas, generates steam, which drives a turbine and generator. The efficiency of energy conversion is significantly increased, reducing the amount of heat wasted, coal burned, and CO₂ and other gases produced for every kilowatt hour of energy generated.

As part of an on-going search for clean coal technology, TransAlta became the first Canadian utility to join the U.S.-based Fuel Cell Commercialization Group. Together with this group of electric and gas utilities, the corporation will gain information on the potential of molten carbonate fuel cells, which could be commercially available as early as the year 2000.

A fuel cell is an electrochemical power generator like a battery which can convert hydrogen, natural gas or coal-derived synthetic gas to electricity without the need for intermediate conversion to heat and mechanical energy. Originally developed for the U.S. space program, this technology is expected to reduce CO₂ emissions by 50 per cent and NO_x and SO₂ emissions essentially to zero, when compared to conventional coal-fired plants.

Turbo-expander – making more of waste energy TransAlta has been involved in the development of another energy efficient technology – the turbo-expander.

The turbo-expander harnesses energy normally lost when high-pressure natural gas is reduced to a lower pressure at gas pressure regulating stations. With the turbo-expander, pressure is lowered by passing the gas through a turbine, which in turn drives an electric generator.

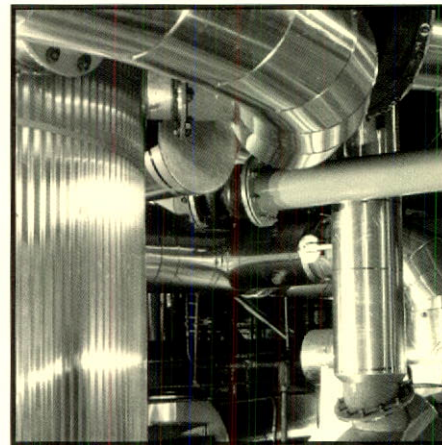
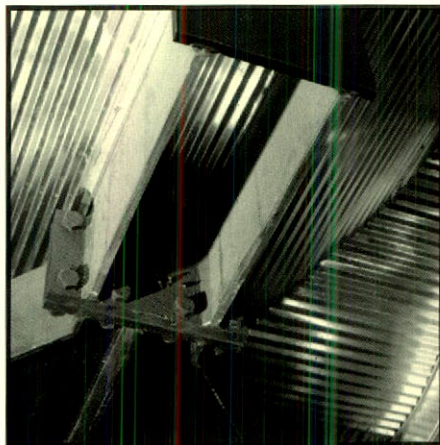
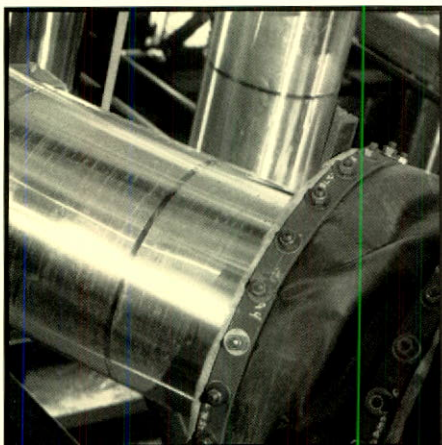
In 1990 a 250-kilowatt unit began operation on the British Gas system in Stretford, England while a 500-kilowatt unit went into service on the Inter-City Gas Corporation system in Dryden, Ontario.

To maximize the application of this technology, TransAlta has entered discussions with a number of international companies with proven technical, marketing and service strengths. It is anticipated that a business arrangement will be concluded in 1991 with one of these companies.

NEW CUSTOMER INCENTIVE PROGRAM FOR ENERGY EFFICIENCY

In 1990 TransAlta was the first Alberta utility to introduce an incentive program for energy efficiency. Under the High Efficiency Motor Program, customers receive rebates of \$400 for each kilowatt saved by installing high-efficiency electric motors. A total of \$750,000 in rebates was approved for 1990 and 1991 to encourage the use of these motors, which are up to 8 per cent more efficient than standard motors. In Alberta, motors use approximately 80 per cent of the electricity supplied to industry. Although TransAlta has long encouraged energy conservation, this cash payment program is expected to further promote energy efficiency.

Also in 1990, the corporation played a strong role in organizing the Canadian Committee on Electrotechnologies National Conference in Calgary. The conference provided an opportunity for utilities and their customers to learn about new technologies which allow more efficient use of electricity.



Demonstration of LNS Burner begins In 1990 TransAlta was the first non-U.S. firm to sign an agreement with the United States Department of Energy for a commercial-scale demonstration project under the Innovative Clean Coal Technology Program. This agreement was the result of strong interest in a TransAlta-owned technology, the Low NO_x SO_x (LNS) Burner, which is designed to significantly reduce the emissions of oxides of nitrogen (NO_x) and sulphur dioxide (SO_2) during coal combustion.

Under the program, the burner will be demonstrated at the Southern Illinois Power Co-operative in Marion, Illinois.

A demonstration of the burner began at Esso Resources Canada Limited's heavy oil recovery development at Cold Lake. Other participants in the project include Shell Canada Limited, Alberta Power

Limited, Fording Coal Limited and the governments of Canada and Alberta. The purpose of the project is to show that coal can be used in place of natural gas to generate steam for heavy oil recovery while controlling acid-rain producing emissions such as SO_2 and NO_x .

The burner is potentially attractive because, if successfully demonstrated, it can deliver comparable emission control for lower costs than alternative technologies.

During coal combustion in the burner, almost all of the sulphur is captured in a molten slag. At the same time the burner converts oxides of nitrogen to harmless elemental nitrogen.

Looking across borders Important considerations in any plan to meet Alberta's future electric needs will be inter-utility co-ordination and the export of power. The reasons are clear: Inter-utility co-ordination increases the efficiency of utilities and the export of power offers a potential source of revenue. Both increase the opportunity to reduce customer rates.

Recognizing the opportunities of inter-utility co-ordination, TransAlta signed a statement of intent with B.C. Hydro. As a result, TransAlta expects to reduce operating costs and to increase revenues from the export of electricity.

The statement of intent was the result of the *B.C. Hydro-Alberta Interconnected System Generation Co-ordination Study* that forecast the benefits of co-ordination between B.C.'s hydro-based system and the coal-based system of Alberta utilities at \$400 million in cost savings over 20 years. This arrangement will allow the utilities to share surplus power and to help defer the need for new plant facilities. These savings can be achieved without the need for added transmission expenditures.

FINANCIAL OVERVIEW

Earnings Earnings per share from continuing operations were \$1.07 in 1990, compared with \$1.11 per share in 1989. The decline in earnings was largely due to an unfavorable regulatory decision, lower-than-anticipated load growth and increased financing costs.

Dividends Dividends declared on common shares for 1990 and 1989 were \$0.98 and \$0.965 per share respectively.

Energy sales Electric energy sales amounted to 22,786 million kilowatt-hours, an increase of 3.8 per cent from 1989. Although less than the forecast on which rates were based, the increase reflected growth in Alberta's industrial sector, especially the forest products industry. Electric energy sales for 1991 are forecast to increase by approximately 6 per cent, with particular strength anticipated in the forestry, petrochemical and metal products industries.

Revenues Electric revenues increased to \$1,063.5 million, up from \$954.9 million in 1989. After deducting for a higher Alberta Electric Energy Marketing Agency charge, electric revenues were \$946.0 million in 1990, compared with \$911.6 million in 1989.

Alberta Electric Energy Marketing Agency

The purpose of the Alberta Electric Energy Marketing Agency (EEMA) is to reduce the disparity in electric rates of customers served by TransAlta, Alberta Power and Edmonton Power. As a result of pooling generation and transmission costs, TransAlta's customers bear as a cost or charge the difference between the company's costs and the higher average costs in Alberta.

The net EEMA charge borne by customer rates was \$117.5 million in 1990, up from \$43.3 million in 1989. The increase was the result of Edmonton Power including costs of unit 2 of the Genesee Plant in the EEMA costs for part of 1990, adjustments of prior years' EEMA costs, and the removal of the Province of Alberta's program of shielding TransAlta's customers from EEMA costs. The net charge for 1991 is forecast to increase to \$155 million, up 32 per cent, or \$37 million, reflecting the inclusion of Genesee unit 2 for a full year. By 1991, the charge will be the most significant factor in rate increases for TransAlta's customers, growing to 14 per cent of customer rates from 3 per cent in 1988.

Operating deductions Operating deductions for 1990 were \$620.3 million, compared with \$588.3 million for 1989. The change reflects increases in energy sales and inflation as well as higher fuel and purchased power costs.

Depreciation expense increased \$10.8 million to \$180.8 million in 1990, reflecting additions to property in rate base.

Allowance for funds used TransAlta capitalizes an allowance for funds used during construction at its cost of capital

related to utility property under construction. As directed by the Public Utilities Board, the company also capitalizes an allowance for funds used on plant held for future use at its cost of capital, including a common equity return which is reduced to a debt cost level to determine the cost of capital. These allowances represent non-cash items of income which will eventually be charged and are expected to be recovered through customer rates over the service life of the assets, commencing with their inclusion in rate base.

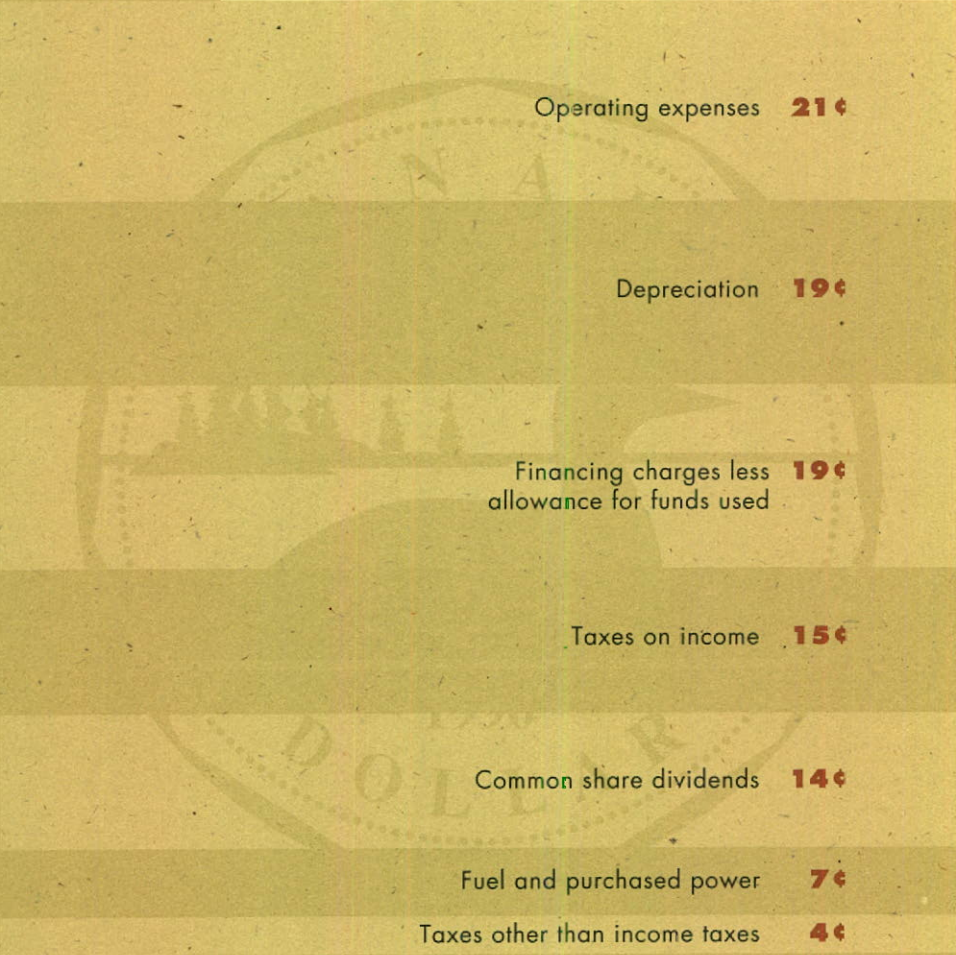
Allowance for funds used during construction declined to \$27.3 million in 1990 from \$35.1 million in 1989 as the construction of facilities such as unit 2 of the Sheerness Plant was completed.

Allowance for funds used on plant held for future use increased to \$18.6 million in 1990 from \$5.6 million in 1989. "Plant held for future use" refers to property that has been completed, commenced service but the cost of which is not included in rates approved by the Board.

This increase resulted from the Board's direction to TransAlta that investment in unit 2 of Sheerness and certain associated transmission facilities be treated as plant held for future use. In July 1990 the investment in the Keephills-Ellerslie transmission system, which was treated by the Board as plant held for future use in 1989, was included in rate base.

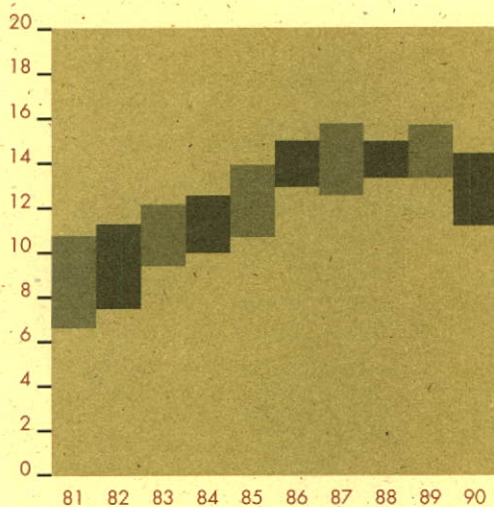
Where the revenue dollar
was spent

26



Operating expenses	21¢
Depreciation	19¢
Financing charges less allowance for funds used	19¢
Taxes on income	15¢
Common share dividends	14¢
Fuel and purchased power	7¢
Taxes other than income taxes	4¢
Reinvestment in the corporation	1¢

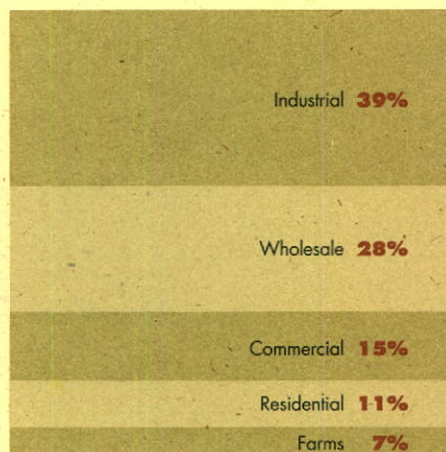
TransAlta's earnings from continuing operations were \$145.3 million in 1990, compared with \$150.0 million in 1989. Dividend levels were maintained and steps were taken to prepare for future financial growth.



Common share price
(market value range in dollars per share)

Discontinued operations Investments in Canada Northwest Energy, an international oil and gas exploration and production company, and the building automation operations of TransAlta Energy Systems, were no longer considered compatible with the company's long-term strategic direction. Steps were therefore taken to sell or otherwise deal with the investment in Canada Northwest Energy and to discontinue the building automation operations. Losses from these two discontinued operations were \$110.0 million or \$0.81 per share.

Capital expenditures TransAlta's capital expenditures were \$280.9 million in 1990, compared with \$293.4 million in 1989. Of these expenditures, 31 per cent were for generation facilities (including 17 per cent for unit 2 of the Sheerness Plant), 30 per cent for distribution facilities, 21 per cent for transmission facilities, 16 per cent for general equipment and 2 per cent for the development of cogeneration projects.

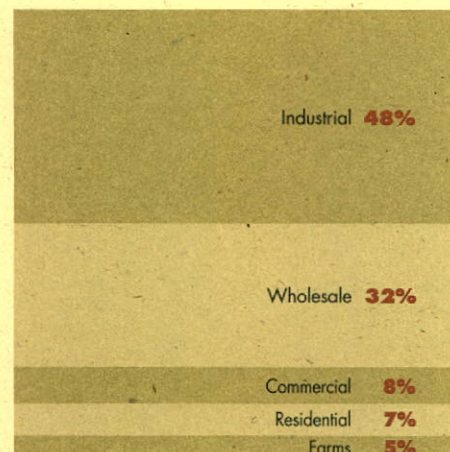


Origin of electric revenue

Although representing a modest portion of the expenditures in 1990, cogeneration offers opportunities for corporate growth. Contracts were completed for two cogeneration projects in Ontario. The projects require some \$168 million in capital expenditures and represent contracts having lifetime revenue of more than \$3.6 billion.

Capital expenditures of \$375 million are forecast for 1991, including \$76 million for the development of additional cogeneration projects, \$83 million for generating facilities and \$216 million for transmission, distribution and other property.

Financings Financing charges were \$228.4 million in 1990, compared with \$216.0 million in 1989. Two issues of secured debentures were sold, each with a principal amount of \$100 million, maturing in the year 2000 and bearing an interest rate of 11½ per cent and 11½ per cent respectively. These issues reduced higher cost short-term debt incurred for the 1990 capital expenditures and provided long-term financing for refunding. In 1989, a



Industrial customers are the largest users of energy

\$100 million issue was sold at 10½ per cent, maturing in 1999.

At the end of 1990, a total of 137.3 million common shares were outstanding, up 2.0 million from 1989. This increase was due to the issue of common shares from the reinvestment of dividends by shareholders.

The Dividend Reinvestment and Share Purchase Plan was modified with the October 1, 1990 dividend. A 5 per cent discount from a five-day weighted average market price was reintroduced for the purchase of common shares issued from treasury and acquired through the reinvestment of cash dividends. A total of \$41.8 million in common equity financing was raised through the plan, largely from the October 1, 1990 and January 1, 1991 dividends.

Credit ratings A weakened financial condition arising from regulatory decisions led to lower credit ratings for TransAlta's securities as follows:

Canadian Bond Rating Service

First Mortgage Bonds

A+ (High), from A++

Secured Debentures

A+ (Low), from A+

First Preferred Shares

P-1, unchanged

Dominion Bond Rating Service

First Mortgage Bonds

AA, from AA (High)

Secured Debentures

AA, unchanged

First Preferred Shares

Pfd-1, unchanged

In explaining its decision, the Canadian Bond Rating Service said, "The rating revision reflects weakening debt coverage ratios over the past two years, resulting from lower utility ROE (return on common equity), higher debt levels and to other regulatory decisions." The Dominion Bond Rating Service lowered credit ratings on first mortgage bonds from AA (High) to AA in 1990 but continued to rate secured debentures at AA since TransAlta indicated that it will no longer issue additional first mortgage bonds.

Credit ratings are intended to provide investors with an independent measure of the credit quality of an issue of securities. Bonds or debentures rated A+ or AA are described by the rating agencies as being of superior investment quality with a high degree of protection of interest and principal. Similarly, preferred shares rated P-1 or Pfd-1 are described as prime credits with strong earnings necessary to pay dividends and any capital repayments of preferred shares.

Rates of service – the year at a glance

TransAlta's rates of service are subject to the regulatory process. This process unfolded in 1990 as follows:

February: As directed by the Board, TransAlta filed a revised schedule of base rates for 1990 and a proposed method of refunding \$99.5 million for 1989 and 1988.

April: The refund was commenced with an initial refund rider.

June: An application by TransAlta for a review and variance of the Board's December 1989 Phase I decision was denied. This application had sought an increase of \$13.7 million or 1.3 per cent over existing rates to offset a reduction in forecast energy sales for 1990 and changes in forecast 1990 financing costs.

September: An application was made to the Board for approval to recover additional revenue with respect to 1990 costs of EEMA. Since TransAlta's load increase in 1990 was less than forecast, the application was required to recover a portion of the fixed EEMA costs.

This application also requested direction to implement a rider for 1991 EEMA costs and to refund an adjustment of 1989 costs.

New rates for electric service were approved by the Board in a Phase II decision.

October: The new rates for electric service became effective, resulting in a 1.1 per cent average reduction of base rates.

December: The Board rejected the September application to recover additional revenue with respect to 1990 EEMA costs, advising that the matter may be reviewed in a future general rate application. The portion of the application for 1991 was approved effective January 1, 1991 and will recover the estimated EEMA shortfall of \$52.1 million for that year. By means of the rider, TransAlta will also refund during 1991 the \$5.3 million arising from an adjustment of the 1989 costs.

The City of Calgary, a major wholesale customer of TransAlta, filed two separate applications with the Board: The first application requests that the Board direct TransAlta to refund to customers \$47.8 million in unbilled revenue (since amended to \$52.4 million). The second requests that the Board direct TransAlta to revise the method of accounting for provincial income taxes to the flow-through method, resulting in a reduction of revenue requirement and an additional refund to customers for 1990.

Both applications by the City of Calgary will be the subject of public hearings in the spring of 1991.

As a consequence of these applications and the Board's treatment of the corporation's application for 1990 EEMA costs, TransAlta filed an application seeking a review and variance or a new determination of the 1990 revenue requirement. The company has reserved the right to amend or withdraw this application pending the outcome of the City of Calgary's applications. TransAlta has deferred \$4.4 million of the unrecovered EEMA costs pending the outcome of its application.

MANAGEMENT'S RESPONSIBILITY

In management's opinion, the financial statements have been properly prepared within reasonable limits of materiality and within the framework of accounting policies consistently applied and summarized in the consolidated financial statements. Since a precise determination of many assets and liabilities is dependent upon future events, the preparation of periodic financial statements necessarily involves the use of estimates and approximations. These have been made using careful judgement and with all information available up to February 8, 1991. Management is responsible for all information in the annual report.

Financial operating data in the report are consistent, where applicable, with the financial statements.

To meet its responsibility for reliable and accurate financial statements, management has established systems of internal control which are designed to provide reasonable assurance that assets are safeguarded and that transactions are executed in accordance with management's authorization. These systems are monitored by internal auditors who perform extensive tests and related procedures.

The financial statements have been examined by Ernst & Young, independent Chartered Accountants. The external auditors' responsibility is to express a professional opinion on the fairness of management's financial statements. The Auditors' Report outlines the scope of their examination and their opinion.

In ensuring that management fulfills its responsibility for financial reporting and internal control, the Board of Directors is assisted by an Audit Committee, whose members are non-management directors. The Audit Committee meets with management, the internal auditors and the external auditors to satisfy itself that each group is properly discharging its responsibilities and to review the financial statements. The internal and external auditors have full and free access to the Audit Committee.

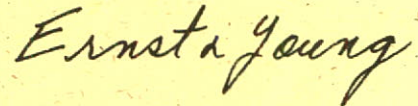
AUDITORS' REPORT

TO THE SHAREHOLDERS OF TRANSALTA UTILITIES CORPORATION

We have audited the consolidated statements of financial position of TransAlta Utilities Corporation as at December 31, 1990 and 1989 and the consolidated statements of earnings and reinvested earnings and cash flows for the years then ended. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Corporation as at December 31, 1990 and 1989 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles.



Chartered Accountants

Calgary, Canada
February 8, 1991

CONSOLIDATED STATEMENTS OF EARNINGS AND REINVESTED EARNINGS

(in millions except earnings per share)

TransAlta Utilities Corporation

Year ended December 31	1990	1989
Electric revenue	\$ 1,063.5	\$ 954.9
Less Alberta Electric Energy Marketing Agency charge - net	117.5	43.3
	946.0	911.6
Operating deductions		
Operating expenses	194.1	177.3
Fuel and purchased power	63.0	57.3
Taxes, other than taxes on income	39.3	36.6
Depreciation	180.8	170.0
Taxes on income	143.1	147.1
	620.3	588.3
Operating income	325.7	323.3
Allowance for funds used		
During construction	27.3	35.1
On plant held for future use	18.6	5.6
	45.9	40.7
Investment income		
Equity income	2.1	2.0
Earnings before financing charges	373.7	366.0
Interest charges		
Long term debt	147.9	138.6
Short term debt	22.8	18.0
Subsidiary	5.7	6.9
	176.4	163.5
Preferred share dividend requirements	52.0	52.5
Financing charges	228.4	216.0
Earnings from continuing operations	145.3	150.0
Discontinued operations	110.0	13.1
Net earnings applicable to common shares (Note 8)	35.3	136.9
Common share dividends	133.2	130.5
Reinvested earnings	(97.9)	6.4
Opening balance	566.1	559.7
Closing balance	\$ 468.2	\$ 566.1
Earnings per share		
Average common shares outstanding	135.9	135.3
From continuing operations	\$ 1.07	\$ 1.11
Net earnings per share	\$ 0.26	\$ 1.01

See accompanying summary of accounting policies and notes.

**CONSOLIDATED STATEMENTS
OF FINANCIAL POSITION**

<i>(in millions)</i>	TransAlta Utilities Corporation	
December 31	1990	1989
ASSETS		
Property account		
Land, buildings, plant and equipment	\$ 4,989.5	\$ 4,749.2
Less accumulated depreciation	1,450.8	1,297.5
	<u>3,538.7</u>	<u>3,451.7</u>
Investments	15.8	15.4
Current assets		
Accounts receivable	171.9	162.7
Income taxes receivable	—	37.6
Materials and supplies at average cost	56.0	49.3
	<u>227.9</u>	<u>249.6</u>
Other assets	41.8	51.6
Net assets of discontinued operations	20.0	124.0
	<u>\$ 3,844.2</u>	<u>\$ 3,892.3</u>

CAPITAL AND LIABILITIES

Capitalization		
Common shares	\$ 671.1	\$ 648.8
Contributed surplus	16.5	15.7
Reinvested earnings	468.2	566.1
Common shareholders' equity	<u>1,155.8</u>	<u>1,230.6</u>
Preferred shares	668.2	673.7
Long term debt	1,469.7	1,319.4
	<u>3,293.7</u>	<u>3,223.7</u>
Current liabilities		
Bank loan and short term notes	115.0	178.6
Accounts payable and accrued liabilities	113.5	111.9
Revenue refund due to customers	29.9	99.1
Dividends payable	46.6	46.2
Income taxes payable	18.5	—
Current portion of long term debt	21.0	35.0
	<u>344.5</u>	<u>470.8</u>
Deferred credits		
Deferred income taxes	33.7	33.7
Customer and other contributions	172.3	164.1
	<u>206.0</u>	<u>197.8</u>
	<u>\$ 3,844.2</u>	<u>\$ 3,892.3</u>

See accompanying summary of accounting policies and notes.

On behalf of the Board:

H G Schayser

Director

M Phillips

Director

CONSOLIDATED STATEMENTS OF CASH FLOWS

<i>(in millions)</i>	TransAlta Utilities Corporation	
Year ended December 31	1990	1989
Cash from operations		
Earnings from continuing operations	\$ 145.3	\$ 150.0
Operating items not using cash	167.5	160.8
	312.8	310.8
Change in non-cash working capital balances	(25.0)	4.9
Common share dividends	(132.7)	(129.8)
Cash from continuing operations	155.1	185.9
Discontinued operations	(2.2)	(8.3)
	152.9	177.6
Cash applied to investments		
Additions to property	280.9	293.4
Less allowance for equity funds used during construction and used on plant held for future use	26.0	23.8
	254.9	269.6
AEC Power Ltd.	0.4	3.2
Cash applied to investments in continuing operations	255.3	272.8
Discontinued operations	0.1	31.1
	255.4	303.9
Cash deficiency before financing	\$ 102.5	\$ 126.3
Financing		
Long term financing		
Common shares	\$ 22.3	\$ —
Long term debt	201.0	112.2
Subsidiary long term debt	21.5	56.2
Repayment of long term debt	(38.6)	(93.9)
Repayment of subsidiary long term debt	(47.3)	(25.0)
Redemption or purchase of preferred shares		
- Parent	(4.7)	(4.7)
- Subsidiary	—	(12.1)
Other	11.9	12.0
Net increase in long term financing	166.1	44.7
Short term financing		
Bank loan and short term notes (decrease) increase	(63.6)	81.6
	\$ 102.5	\$ 126.3

See accompanying summary of accounting policies and notes.

SUMMARY OF ACCOUNTING POLICIES

Generally Accepted Accounting Principles The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in Canada. These principles conform in all material respects with International Accounting Standards.

The Corporation is engaged primarily in the production and sale of electric energy in the Province of Alberta and its activities are classified as one segment for financial reporting purposes.

Regulation The Corporation is regulated by the Energy Resources Conservation Board pursuant to the Hydro and Electric Energy Act (Alberta) and the Public Utilities Board pursuant to Part II of the Public Utilities Board Act (Alberta). The Corporation is also subject to the Provincial Water Power Regulations (Alberta). These Acts and Regulations cover such matters as rates, construction, operations and accounting.

Allowance For Funds Used During Construction And Used On Plant Held For Future Use The Corporation capitalizes an allowance for funds used during construction at its cost of capital related to utility property under construction. As directed by the Public Utilities Board, the Corporation capitalizes an allowance for funds used on plant held for future use at its cost of capital which includes a common equity return reduced to a debt cost level in determining the cost of capital.

These amounts represent non-cash items of income which will eventually be charged and recovered in rates to customers over the service life of the assets, commencing with their inclusion in rate base.

Consolidation And Investments The consolidated financial statements include the accounts of the Corporation and all its subsidiaries, of which TransAlta Resources Corporation, TransAlta Fly Ash Ltd., Kanelk Transmission Company Limited and Farm Electric Services Ltd. are active.

TransAlta Resources Corporation holds investments and has certain non-utility operations, including cogeneration projects under construction. TransAlta Fly Ash Ltd. processes and sells fly ash gathered at the Corporation's coal fired generating plants. Kanelk Transmission Company Limited owns facilities interconnecting the Corporation's transmission system between the Crowsnest Pass region and the Kananaskis River valley and in doing so passes through a portion of British Columbia. Farm Electric Services Ltd. is a non-profit entity which organizes, constructs, operates and maintains, at cost, electric distribution systems owned by rural electrification co-operative associations.

TransAlta Resources' investment in AEC Power Ltd. is accounted for by the equity method.

Customer Contributions Customer contributions for new service connections amounting to \$169.3 million at December 31, 1990 (\$161.0 million in 1989) are credited to deferred revenue and amortized over the expected terms of the revenue deficiencies. The composite rate of amortization is approximately 3% per annum.

Financing Costs Unamortized financing costs are included in other assets and are amortized to earnings as follows:

Debt issues – over the lesser of the remaining original life or the estimated average life of the issue.

Preferred share issues – over the estimated average life of the issue.

Gains or losses realized on the purchase of Corporation debt for sinking fund purposes are amortized over the remaining life of the issue. These policies are in accordance with the method of determining the Corporation's cost of capital for regulatory purposes.

Plant Held For Future Use Plant held for future use is property which has been completed and is in service but which is not recognized as such by the Public Utilities Board. The Board has directed that it not be included in rate base until some future date and has also directed the Corporation to capitalize an allowance for funds used on plant held for future use.

Revenue Recognition Revenues are recognized on the accrual basis which includes an estimate of the value of electricity consumed by customers and billed subsequent to year end.

Taxes On Income Earnings from operating activities are taxed by a tax allocation method under which all related income taxes are paid on a current basis and not deferred. Income taxes on earnings from construction activities will only be recorded when the costs of the constructed assets are depreciated and included in rates to customers, since there is reasonable expectation that such income taxes will be included at that time in rates set by the Public Utilities Board and recovered from customers.

Prior to 1990, under the Public Utilities Income Tax Transfer Act (Canada) and enabling legislation passed by the Province of Alberta, 95% of the federal and 100% of the provincial income taxes paid by the Corporation attributable to its electric utility operations were rebated to its customers. Effective for the 1990 taxation year, rebates of federal income tax have been frozen at the 1989 level for a period of two years and rebates of provincial income tax have been eliminated.

For 1981 and 1982 the Corporation reduced its federal income tax provision and payments by one half by claiming deductions greater than the amounts charged in the accounts. This federal tax reduction of \$58.8 million has not been recorded in the accounts since there is reasonable expectation that when such taxes are payable they will be recoverable in customer rates at that time. Prior to 1973 deferred income taxes were recorded and included in customer rates.

Translation Of Foreign Currency Long term debt payable in foreign currency is translated at the current exchange rate. The resulting adjustment is amortized over the remaining life of the debt in accordance with the method used in determining the Corporation's cost of capital for regulatory purposes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(tabular dollar amounts in millions)

1. PROPERTY ACCOUNT

	Depreciation rates	December 31	
		1990	1989
Hydro production	2.52%	\$ 248.1	\$ 243.5
Thermal production including coal mines	2.90% - 4.13%	1,836.3	1,822.7
Environmental control	3.33%	346.7	345.5
Transmission lines, substations and distribution systems	3.99% - 5.71%	1,771.5	1,611.0
Other	Various	366.1	333.1
Plant held for future use		299.7	48.7
Property under construction	- Utility	115.3	344.7
	- Cogeneration	5.8	—
		4,989.5	4,749.2
Less accumulated depreciation		1,450.8	1,297.5
		\$ 3,538.7	\$ 3,451.7

The land, buildings, plant and equipment are carried at cost. The Corporation provides for depreciation on a straight line basis using various rates as set by the Public Utilities Board based on depreciation studies prepared by the Corporation which result in an overall composite rate of 4.15% (4.04% in 1989).

The allowance for funds used during construction was capitalized at a rate of 11.4% (11.4% in 1989) on utility property under

2. INVESTMENTS

The amounts are in respect of the Corporation's investment in AEC Power Ltd. TransAlta Resources holds other investments which are recorded at nominal values.

3. OTHER ASSETS

	December 31	
	1990	1989
Unamortized financing costs	\$ 22.9	\$ 26.2
Unamortized preliminary construction costs - Keephills units 3 and 4	18.9	25.4
	\$ 41.8	\$ 51.6

Other assets represent amounts recoverable from customers in future years.

Unamortized financing costs are amortized to earnings on the basis of remaining or average life of an issue and are recovered in rates to customers.

construction. The allowance for funds used on plant held for future use was capitalized at a rate of 10.7% (11.2% in 1989).

Plant held for future use in 1989 was in respect of the Corporation's investment in the Keephills-Ellerslie transmission system, which was included in rate base in July 1990. The 1990 amount is in respect of the Corporation's investment in unit 2 of the Sheerness generating station and certain associated transmission facilities.

AEC Power Ltd. owns and operates the utilities plant that supplies electric energy and steam on a cost of service basis to the Syncrude Project for production of synthetic crude oil from the Alberta oil sands. The investment consists of 50% of the voting common shares, which represents one third of the outstanding shares.

The unamortized Keephills units 3 and 4 costs are charged to earnings and recovered in rates to customers in equal annual amounts ending in 1993, in accordance with a direction of the Public Utilities Board.

4. CAPITALIZATION

i) **Common shares** At December 31, 1990 and 1989 the authorized common share capital consisted of an unlimited number of Common Shares, all without nominal or par-value. A total of 137.3 million Common Shares were outstanding at December 31, 1990 (135.3 million in 1989) and during 1990 a total of 2.0 million shares were issued under the terms of the Corporation's Dividend Reinvestment and Share Purchase Plan for cash proceeds of \$22.3 million.

Under the terms of a share option plan, the Corporation is authorized to grant certain key employees options to purchase up

to an aggregate of 2,000,000 Common Shares at prices based on the market price of the shares as determined on the date of the grant. Options may not be exercised until one year after grant and thereafter at an amount not exceeding 20% of the grant per year on a cumulative basis until the sixth year, after which the entire grant may be exercised at any time prior to expiry. During the year ended December 31, 1990, options to purchase 4,000 shares were exercised at a price of \$12.625. At December 31, 1990, options to purchase 1,221,000 shares were outstanding at prices ranging from \$11.875 to \$14.375 per share and expiring from 1996 - 2000.

ii) Preferred shares

	4% to 5.40%		7% to 9%		December 31	
First Preferred Shares					1990	1989
Changes during the year:						
Cancelled through						
Purchase fund	\$ —	\$ (5.4)			\$ (5.4)	\$ (4.8)
Other	(0.1)	—			(0.1)	(0.4)
	\$ (0.1)	\$ (5.4)			\$ (5.5)	\$ (5.2)
Number of shares					(55,203)	(51,568)
Number of votes					(42,003)	(38,368)
Issued and outstanding:						
Purchase fund	\$ —	\$ 665.1			\$ 665.1	\$ 670.5
Other	3.1	—			3.1	3.2
	\$ 3.1	\$ 665.1			\$ 668.2	\$ 673.7
Number of shares					23,021,920	23,077,123
Number of votes					6,384,610	6,426,613
Retraction privileges:						
In 1992	\$ —	\$ 149.2			\$ 149.2	\$ 149.2
In 1993	—	100.0			100.0	100.0
In 1994	—	100.0			100.0	100.0
In 1995	—	194.4			194.4	194.4
No retraction	3.1	121.5			124.6	130.1
	\$ 3.1	\$ 665.1			\$ 668.2	\$ 673.7

The authorized preferred share capital consists of an unlimited number of First and Second Preferred Shares, all without nominal or par value.

The preferred shares, which are issuable in series, are cumulative and redeemable at designated dates at the option of the Corporation at their subscription price together with a premium not in excess of the annual dividend. Certain series are retractable at the option of the holder on designated dates at their subscription price plus any accrued and unpaid dividends. Certain series have annual purchase funds which are non-cumulative but require the Corporation to make all reasonable

efforts to purchase for cancellation, in the open market, preferred shares at a price not exceeding their subscription price plus any accrued and unpaid dividends and costs of purchase.

An annual purchase fund may be required for up to \$12.9 million stated capital in each of 1991 and 1992, and \$7.9 million stated capital in each of 1993, 1994 and 1995. Any such requirements could reduce the retraction privileges.

The excess of the subscription price of the preferred shares cancelled over their purchase cost amounted to \$0.8 million in 1990 (\$0.5 million in 1989) and is included in contributed surplus.

iii) Long term debt

	6¾% to	10% to	14¾% to	December 31	
	9¾%	13¾%	17¾%	1990	1989
First mortgage bonds	\$ 55.0	\$ 100.0	\$ —	\$ 155.0	\$ 155.0
Foreign debt	34.8	—	—	34.8	37.7
Debentures	119.9	943.6	39.0	1,102.5	931.1
Notes payable	—	—	40.0	40.0	40.0
Capital leases	68.9	—	—	68.9	73.0
Other	16.0	—	—	16.0	18.3
Subsidiary loan	—	73.5	—	73.5	99.3
	294.6	1,117.1	79.0	1,490.7	1,354.4
Current portion	9.8	8.2	3.0	21.0	35.0
	\$ 284.8	\$ 1,108.9	\$ 76.0	\$ 1,469.7	\$ 1,319.4

The following principal amounts and sinking fund requirements, excluding current portion, are due:

In 1991	\$ —	\$ —	\$ —	\$ —	\$ 30.3
In 1992	26.6	26.9	13.5	67.0	66.9
In 1993	43.1	141.1	9.9	194.1	194.0
In 1994	38.9	119.2	8.1	166.2	166.1
In 1995	9.3	8.3	11.4	29.0	28.8
1996 to 2000	148.0	714.3	33.1	895.4	681.8
After 2000	18.9	99.1	—	118.0	151.5
	\$ 284.8	\$ 1,108.9	\$ 76.0	\$ 1,469.7	\$ 1,319.4

The first mortgage bonds are secured by a first charge on certain of the Corporation's land, buildings, plant and equipment and by a first floating charge on all other assets situated in the Province of Alberta. The Trust Deed provides for a sinking fund for the retirement of first mortgage bonds, payable on September 1 of each year, of 1% of the principal amount of all first mortgage bonds outstanding. All foreign debt of the Corporation is shown separately stated in equivalent Canadian dollars. This debt consists of first mortgage bonds payable in United States dollars of \$2.5 million per year over the next 12 years.

The debentures are secured by a floating charge on the property and assets of the Corporation subject to the first specific charge and the first floating charge securing the first mortgage bonds.

The notes payable are unsecured, have no authorized limit, bear interest determined at June 30 and December 31 of each year at the greater of the five-year bank term deposit rate or the prevailing bank prime interest rate and mature December 31 in each year. These amounts are payable to rural electrification cooperative associations through their agent, Farm Electric Services

Ltd., and represent a portion of funds contributed by members of these associations.

The Corporation leases, with options to purchase, draglines costing \$92.2 million (\$92.2 million in 1989). The cost of this equipment is included in the property account and classified as thermal production. The related liability is included in long term debt to reflect the effective acquisition and financing of the equipment. Accumulated amortization amounted to \$29.4 million at December 31, 1990 (\$25.6 million in 1989). The future minimum payments under the capitalized leases are \$9.8 million per year for the next two years, \$15.6 million in 1993, \$8.0 million in 1994, \$8.0 million in 1995 and \$54.1 million thereafter. The imputed interest included in these future minimum rentals is \$36.4 million at December 31, 1990 (\$42.1 million in 1989).

The subsidiary has available a credit facility of \$100.0 million. Funds drawn under this facility bear interest at current lending rates and are convertible into term debt upon 30 days' notice by either party. At December 31, 1990, \$73.5 million of the facility had been utilized (\$99.3 million in 1989).

5. ALBERTA ELECTRIC ENERGY MARKETING AGENCY CHARGE

The Alberta Electric Energy Marketing Agency charge-net was \$121.9 million in 1990 (\$43.3 million in 1989) of which \$4.4 million has been deferred as discussed in note 6. These amounts arise from the operation of the Electric Energy Marketing Act (Alberta) and are to be included in the Corporation's rates for service which are collected from its customers.

The purpose of the Electric Energy Marketing Act (Alberta) is to reduce the disparity in electric rates throughout Alberta resulting from differing power generation and transmission costs of the three major electric utilities. The Alberta Electric Energy Marketing Agency (Agency) purchases electric energy generated by the Corporation, Alberta Power Limited and Edmonton Power at a

price fixed by the Public Utilities Board for each utility. The Agency immediately resells the electric energy to the utility from which it was purchased at the average price of all electric energy purchased.

As the Corporation is the lowest cost producer of electricity, the price fixed by the Board for electric energy for the Corporation is currently below the average price established by the Agency, which gives rise to a net charge from the Agency to the Corporation. This net charge must be paid by the Corporation

6. RATES FOR SERVICES

As directed by the Public Utilities Board in a Phase I decision rendered in December 1989 and amended in February 1990, on February 20, 1990, TransAlta filed a revised schedule of base rates for 1990 and a proposed method of refunding \$99.5 million with respect to 1989 and 1988. Effective April 1, 1990, the Corporation commenced the refund by means of an initial refund rider. In a Phase II decision rendered in September, the Board approved new rates for electric service effective October 1, 1990.

In June 1990, the Board denied an application by the Corporation for a review and variance of the Board's Phase I decision. This application had sought an increase of \$13.7 million or 1.3 per cent over existing rates to offset a reduction in the forecast of energy sales for 1990 and changes in forecast 1990 financing costs.

In September 1990, the Corporation applied to the Board for approval to recover additional revenue with respect to 1990 Alberta Electric Energy Marketing Agency (Agency) costs. The application was required as the Corporation's load increase for 1990 was less than forecast, which would have resulted in a portion of the fixed Agency costs being unrecovered without the application. In December 1990, the Board rejected the application but advised the matter could be reviewed in a future general rate application.

7. DISCONTINUED OPERATIONS

	Year ended December 31	
	1990	1989
Loss from operations to measurement date		
TransAlta Energy Systems Corporation	\$ 3.8	\$ 9.2
Canada Northwest Energy Limited	6.8	3.9
	10.6	13.1
Loss on discontinuance		
TransAlta Energy Systems Corporation (includes writeoff of deferred tax asset of \$11.0 million and losses of a subsidiary of \$4.5 million)	28.7	—
Canada Northwest Energy Limited	70.7	—
	99.4	—
	\$ 110.0	\$ 13.1
Net assets of discontinued operations		
TransAlta Energy Systems Corporation	\$ —	\$ 24.5
Canada Northwest Energy Limited	20.0	99.5
	\$ 20.0	\$ 124.0

and recovered in the rates for service charged to the Corporation's customers.

During the phase-in period of the Agency's operation, which started in 1982, the Province of Alberta provided shielding for the Corporation's customers from net charges arising out of the averaging process. Effective June 1989, the Province discontinued this shielding.

In late 1990, the City of Calgary filed two separate applications with the Board seeking review and variance of the Corporation's 1990 Phase I decision. The first application requests the Board to direct TransAlta to refund \$47.8 million to the Corporation's customers in respect of unbilled revenue. The second application requests the Board to direct TransAlta to revise the method of accounting for provincial income taxes to the flow-through method, resulting in a reduction of revenue requirement and an additional refund to customers for 1990.

As a consequence of these applications and the Board's treatment of the Corporation's application to recover additional revenue with respect to unrecovered 1990 Agency costs, in December, 1990, TransAlta filed an application with the Board seeking a review and variance or, in the alternative, a new determination of the 1990 revenue requirement. TransAlta reserved the right to amend or withdraw this application pending the dispositions of the two applications described above. TransAlta has deferred \$4.4 million of the unrecovered Agency costs pending the outcome of its application.

Both applications by the City of Calgary will be the subject of public hearings in the spring of 1991. While the Corporation is not in a position to assess the impact of the applications on 1990 earnings, it believes the returns recorded in 1990 to be in accordance with those determined by the Board.

Effective June 30, 1990 TransAlta discontinued the building automation operations of its wholly owned subsidiary, TransAlta Energy Systems Corporation. TransAlta Energy Systems has concluded arrangements with a third party to complete all existing projects, honor outstanding warranties and continue service to its customers.

TransAlta intends to sell or otherwise deal with its investment in Canada Northwest Energy. Effective December 31, 1990, the Corporation discontinued equity accounting for this investment. The Corporation has reduced the carrying value in the investment

to \$20.0 million. Canada Northwest Energy is an international oil and gas exploration and production company.

The investment in Canada Northwest Energy Limited represents an interest of approximately 40% consisting of 15,374,320 common shares, \$18.2 million principal amount 8% convertible debentures, \$8.0 million stated value 6% convertible preferred shares and \$20.0 million stated value 7% convertible preferred shares.

These decisions have been accounted for on a retroactive basis as discontinued operations and certain of the comparative amounts have been restated.

8. NET EARNINGS AND TAXES ON INCOME

	Year ended December 31	
	1990	1989
Statutory income tax rates	43.8%	43.8%
Adjustments -		
i) Equity income	(0.3)	(0.3)
ii) Allowance for equity funds used during construction and used on plant held for future use, net of applicable depreciation adjustment	(2.1)	(1.3)
iii) Coal mining allowances	(1.8)	(1.8)
iv) Subsidiary losses available for future years	2.1	1.3
v) Large corporations tax	0.9	0.5
vi) Other	(0.6)	(0.1)
Effective income tax rate	42.0%	42.1%

Net earnings in 1990 were \$87.3 million (\$189.4 million in 1989) after deducting taxes on income. As outlined in the above table, taxes on income from continuing operations vary from the

amount that would be determined by applying the combined statutory Canadian federal and Alberta provincial income tax rates to pre-tax earnings,

9. PENSION PLAN

The Corporation maintains a defined benefit retirement pension fund covering substantially all employees. At December 31, 1990, the market value of pension fund assets for actuarial purposes

was \$245.9 million (\$225.5 million in 1989) and exceeded the estimated actuarial present value of accrued pension obligations by \$2.1 million (\$0.7 million in 1989).

10. RESTATED AMOUNTS

Certain of the comparative amounts have been reclassified to conform with the statement presentation adopted in 1990.

TEN-YEAR SUMMARY OF TRANSALTA UTILITIES CORPORATION

FINANCIAL RECORD <i>(millions of dollars except where noted)</i>	1990	1989
Statement of earnings		
Electric revenue	1,063.5	954.9
Alberta Electric Energy Marketing Agency (charge) recovery - net	(117.5)	(43.3)
Operating deductions	(620.3)	(588.3)
Allowance for funds used during construction	27.3	35.1
Allowance for funds used on plant held for future use	18.6	5.6
Investment income	2.1	2.0
Interest charges	(176.4)	(163.5)
Preferred share dividend requirements	(52.0)	(52.5)
Earnings from continuing operations before extraordinary item	145.3	150.0
Extraordinary item	—	—
Earnings from continuing operations	145.3	150.0
Discontinued operations	(110.0)	(13.1)
Net earnings applicable to common shares	35.3	136.9
Common shareholders' investment		
Average common shareholders' investment (weighted)	1,188.9	1,227.1
Return from continuing operations on weighted average common shareholders' investment (%)	12.2	12.2
Common share information (dollars per share)		
Book value (year end)	8.42	9.10
Earnings from continuing operations	1.07	1.11
Net earnings	0.26	1.01
Dividends declared	0.98	0.965
Coverages (times earned before income tax)		
Interest	3.0	3.2
Interest and preferred dividends	2.0	2.0
Assets and property		
Total assets (year end)	3,844.2	3,892.3
Property account	3,538.7	3,451.7
Electric utility property in service (year end)	3,117.9	3,058.3
Additions to property	280.9	293.4
Capitalization (year end)		
Common shareholders' equity	1,155.8	1,230.6
Preferred shares	668.2	673.7
Long term debt	1,396.2	1,220.1
Subsidiary long term debt	73.5	99.3
Preferred shares of a subsidiary	—	—
	3,293.7	3,223.7
STATISTICAL RECORD		
Electric energy sales (millions of kWh)		
Residential and commercial	3,306	3,205
Industrial	10,911	10,359
Cities and towns under wholesale contracts	7,376	7,216
Farms	1,193	1,162
	22,786	21,942
Generating capability (nominal net MW)		
Hydro	800	800
Thermal	3,676	3,493
	4,476	4,293
Sources of primary energy (millions of kWh)		
Hydro	2,051	1,589
Thermal -Gas	—	—
-Coal	25,584	25,510
Net purchases and exchanges	(2,809)	(2,969)
	24,826	24,130
Customers		
Served directly	312,131	303,684
Served indirectly through wholesale contracts	320,807	314,430

* Before extraordinary item.

1988	1987	1986	1985	1984	1983	1982	1981
909.6	917.0	909.0	833.8	788.6	657.1	493.6	406.2
17.4	8.5	(15.9)	(21.5)	(27.6)	(18.9)	—	—
(585.3)	(582.3)	(557.6)	(500.8)	(464.9)	(402.5)	(313.7)	(244.9)
38.2	38.7	61.0	75.6	77.3	97.4	85.2	35.4
—	0.5	0.4	—	—	—	—	—
1.9	5.4	12.9	8.2	16.7	17.0	23.4	22.2
(146.2)	(130.3)	(147.7)	(136.3)	(135.6)	(135.2)	(106.6)	(76.9)
(61.7)	(80.9)	(84.0)	(86.3)	(77.1)	(66.5)	(53.5)	(37.1)
173.9	176.6	178.1	172.7	177.4	148.4	128.4	104.9
—	—	—	—	—	—	(33.4)	—
173.9	176.6	178.1	172.7	177.4	148.4	95.0	104.9
(57.6)	2.4	(124.6)	8.2	6.3	2.9	(2.2)	(1.0)
116.3	179.0	53.5	180.9	183.7	151.3	92.8	103.9
1,236.6	1,301.6	1,278.9	1,256.9	1,150.9	879.6	777.6	680.1
14.1	13.6	13.9	13.7	15.4	16.9	16.5*	15.4
9.05	9.87	9.46	9.93	9.39	8.60	7.69	7.48
1.29	1.31	1.35	1.33	1.39	1.37	1.24*	1.09
0.86	1.33	0.41	1.39	1.44	1.39	0.90	1.08
0.93	0.92	0.86	0.81	0.74	0.69	0.60	0.52
3.8	4.4	4.1	4.1	4.1	3.5	3.0	3.3
2.2	2.3	2.2	2.2	2.2	2.1	2.0	2.3
3,721.6	3,685.5	3,701.9	3,733.7	3,513.8	3,291.0	2,810.3	2,373.4
3,335.6	3,286.1	3,273.5	3,187.1	3,055.2	2,858.5	2,459.5	1,928.6
3,024.8	3,005.3	2,993.4	2,560.5	2,536.0	2,212.1	1,601.8	1,456.7
229.7	169.9	233.8	253.1	304.8	490.8	605.6	399.5
1,223.7	1,334.3	1,265.7	1,298.9	1,214.7	1,084.2	797.7	789.4
678.9	758.7	689.7	741.8	707.8	621.9	664.1	476.4
1,149.4	946.2	992.3	1,054.2	1,022.7	985.2	909.3	582.7
68.1	—	—	39.7	1.9	42.9	—	—
—	124.2	160.0	160.0	120.0	70.0	—	2.0
3,120.1	3,163.4	3,107.7	3,294.6	3,067.1	2,804.2	2,371.1	1,850.5
3,129	2,928	2,854	2,802	2,671	2,539	2,557	2,332
9,922	8,789	8,215	7,994	7,205	5,963	5,197	4,901
7,002	6,668	6,522	6,453	6,240	6,107	6,010	5,536
1,117	1,006	1,006	999	962	904	906	803
21,170	19,391	18,597	18,248	17,078	15,513	14,670	13,572
800	800	800	800	800	800	800	800
3,493	3,493	3,493	3,310	3,310	2,933	2,556	2,556
4,293	4,293	4,293	4,110	4,110	3,733	3,356	3,356
1,423	1,444	1,791	1,385	1,420	1,473	1,584	2,027
—	—	—	—	—	6	19	3
26,342	24,839	23,813	23,181	21,256	18,062	16,379	14,276
(4,619)	(4,970)	(5,304)	(4,610)	(3,965)	(2,398)	(1,785)	(1,332)
23,146	21,313	20,300	19,956	18,711	17,143	16,197	14,974
296,601	292,177	287,758	283,254	279,164	275,226	267,001	264,497
306,327	300,672	296,674	292,538	292,324	292,774	279,722	274,255

CORPORATE INFORMATION

Head Office

110 - 12th Avenue S.W.
Calgary, Alberta

Postal Address

Box 1900
Calgary, Alberta T2P 2M1

Auditors

Ernst & Young
Chartered Accountants
Calgary, Alberta

Transfer Agents and Registrars

First Preferred Shares:

Central Guaranty Trust
Company
Vancouver, Calgary,
Edmonton, Regina, Winnipeg,
Toronto, Montreal

Common Shares:

Montreal Trust Company
Vancouver, Calgary,
Edmonton, Regina, Winnipeg,
Toronto, Montreal

Trustees and Registrars

First Mortgage Bonds:

Montreal Trust Company
Vancouver, Calgary, Toronto,
Montreal

Debentures:

Royal Trust Company
Vancouver, Calgary, Toronto,
Montreal

Dividend Reinvestment and Share Purchase Plan:

Montreal Trust Company
Calgary

Common Share Information:

The Corporation's common shares were split 3 for 1 on May 8, 1980 and 2 for 1 on February 1, 1988.

The valuation day value of common shares owned on December 31, 1971, adjusted for stock splits, is \$4.54 per share.

The adjusted cost base of common shares held on January 31, 1988 is reduced by \$0.75 per share subsequent to the February 1, 1988 split.

Ticker Symbol: TAU

Listed on the Alberta, Montreal and Toronto stock exchanges.

TransAlta Utilities Directors

Robert G. Black, Q.C.

General Counsel
TransAlta Utilities
Corporation
Counsel
McCarthy Tétrault
Calgary, Alberta

D'Arcy D. Durcan, Q.C.

Partner
Duncan & Craig
Winterburn, Alberta

John T. Ferguson

President and Chief
Executive Officer
Princeton Developments Ltd.
Edmonton, Alberta

Douglas J. Gordon

Corporate Consultant
Willowdale, Ontario

Lou D. Hyndman, Q.C.

Senior Partner
Field & Field
Edmonton, Alberta

Donna Soble Kaufman

Partner
Stikeman, Elliott
Montreal, Quebec

J. Wallace Madill

Agricultural and Management
Consultant
Calgary, Alberta

Gerald J. Maier

President and Chief
Executive Officer
TransCanada PipeLines
Limited
Calgary, Alberta

Walter J. McCarthy

Chairman of the Board
Growth Investment
Corporation
Toronto, Ontario

Ken F. McCready

President and Chief
Executive Officer
Calgary, Alberta

H.J. Sanders Pearson

Chairman of the Board
Century Sales and Service
Limited
Edmonton, Alberta

Ross F. Phillips, F.C.A.

Corporate Consultant
Calgary, Alberta

Harry G. Schaefer, F.C.A.

Deputy Chairman of the
Board and Chief Financial
Officer
Calgary, Alberta

Ralph A. Thrall, Jr.

President
McIntyre Ranching Co. Ltd.
Lethbridge, Alberta

Marshall M. Williams

Chairman of the Board
Calgary, Alberta

TransAlta Utilities Officers

Marshall M. Williams

Chairman of the Board

Harry G. Schaefer, F.C.A.

Deputy Chairman
of the Board and
Chief Financial Officer

Ken F. McCready

President and
Chief Executive Officer

William L. Fraser

Senior Vice-President

Jim Leslie

Senior Vice-President
Corporate Services

Walter Nieboer

Senior Vice-President
Non-Regulated Operations

Walter Saponja

Senior Vice-President
Operations

Don G. Bacon

Vice-President
Export

Ed J. Barry

Vice-President
Environment and Research

Ron E. Bergen

Vice-President
Administration

Mike J. Halpen

Vice-President
Human Resources

Wolfgang Janke

Vice-President
Customer Services

F.A. Richard McKinnon

Vice-President
Finance

Murray A. Nelson

Vice-President
Transmission

John A. Tapics

Vice-President
Generation

Robert C.P. Westbury

Vice-President
Edmonton Region

Robert G. Black, Q.C.

General Counsel

Ron L. McCrimmon

Corporate Secretary

William A. Veres

Treasurer

TransAlta Resources Directors

Robert G. Black, Q.C.
 Lou D. Hyndman, Q.C.
 Walter J. McCarthy
 Ken F. McCready
 Ross F. Phillips, F.C.A.
 Harry G. Schaefer, F.C.A.
 Marshall M. Williams

TransAlta Resources Officers

Harry G. Schaefer, F.C.A.
 Chairman of the Board and
 Chief Financial Officer
 Ken F. McCready
 President and Chief
 Executive Officer
 Walter Nieboer
 Senior Vice-President
 Operations
 William L. Fraser
 President
 TransAlta Technologies, Inc.
 Rick A. Winsor
 Vice-President
 F.A. Richard McKinnon
 Vice-President
 Alan C. Moon
 Vice-President
 Corporate Development
 Ron L. McCrimmon
 Secretary
 William A. Veres
 Treasurer
 Marvin J. Waiand
 Controller

**Northern Alberta
Advisory Board**

Muriel Abdurahman
 Chairman
 Alberta Hospital (Edmonton)
 Fort Saskatchewan, Alberta
 Alex H. Allan
 Farmer
 Rivière Qui Barre, Alberta

Howard Bowes
 Owner/Publisher
 Lynard Publishers
 Leduc, Alberta
 Keith Bradley
 Owner
 The Bradson Group
 Sherwood Park, Alberta

Addie C. Coleman
 President
 Parkland Holdings Ltd.
 Wainwright, Alberta

Glen Johnson
 President
 Camrose Lutheran
 University College
 Camrose, Alberta

William S. Kostiw
 Farmer
 Rochester, Alberta

Dave McArthur
 Owner
 McArthur Enterprises
 Lac La Biche, Alberta

Tom M. McGee
 Mayor
 Drayton Valley, Alberta

Enid Schreiber
 Co-owner
 Roadway Construction Co.
 and Larkspur Farms Ltd.
 Jarvie-Dapp, Alberta

Allan Shenfield
 Farmer
 Spruce Grove, Alberta

Roger Vold
 Business Consultant
 Wetaskiwin, Alberta

**Southern Alberta
Advisory Board**

Pat C. Blakely
 Retiree
 Sylvan Lake, Alberta

Terry A. Bland
 President
 Terry Bland Photography
 Lethbridge, Alberta

Harry V. Fowler
 Owner
 Harry Fowler Men's Wear
 Brooks, Alberta

Kathryn L. Habberfield
 Farmer
 Langdon, Alberta

Bert T. Hargrave
 President
 Hargrave Ranching Co., Inc.
 Walsh, Alberta

Neil K. Leatherdale
 Past president
 Leatherdale Publishing Ltd.
 Olds, Alberta

Reinhold Lehr
 President
 Short Grass Ranches Limited
 Medicine Hat, Alberta

Glenn C. Logan
 Farmer
 Lomond, Alberta

Ron Marra
 President
 Marra's Grocery
 Canmore, Alberta

Marilyn Sharp
 Farmer
 Lacombe, Alberta

Bill Stephenson
 Alberta Gas Ethylene Co. Ltd.
 Red Deer, Alberta

Wilson Sutherland
 Farmer
 High River, Alberta

Environmental Advisory Panel

Pat E. Brock
 Consumers' Association
 of Canada (Alberta)
 Edmonton, Alberta

Elizabeth M. Butler
 Occupational Health Nurse
 Edmonton, Alberta

Don Detomasi
 Past Dean, Faculty of
 Environmental Design,
 University of Calgary,
 Calgary, Alberta

Shirley Cripps
 Past Associate Minister of
 Agriculture (Alberta)
 Westeros, Alberta

Ralph A. Jespersen
 Unifarm
 Edmonton, Alberta

Martha S. Kostuch
 Environmentalist
 Rocky Mountain House,
 Alberta

Elmer A. Kure
 Past President, Alberta
 Fish & Game Association
 Innisfail, Alberta

Tony Reuvers
 Manager, Health, Safety and
 Environmental Risk
 Novacor
 Calgary, Alberta

Dan G. Stoker
 Society, Environment and
 Energy Development Studies
 Foundation
 Edmonton, Alberta

Donna G. Tingley
 Environmental Law Centre
 Edmonton, Alberta

Cliff A. Wallis
 Wilderness Area Consultant
 Calgary, Alberta

Ray I. Woods
 Manager, Oil & Gas
 Development
 Shell Canada Ltd.
 Calgary, Alberta

TRANSALTA SERVICE AREA



In 1990 TransAlta supplied 71.4 per cent of the electric energy consumed by utility customers in Alberta.

GLOSSARY OF INDUSTRY TERMS

Alberta Electric Energy Marketing Agency (EEMA) Agency established by the Province of Alberta to reduce the disparity in electric power rates.

Cogeneration The simultaneous production of both electricity and useful heat. The combined process is more efficient than a process designed only for the production of electricity.

Distribution Process of moving electric energy at lower voltages from major substations to customers.

Energy conservation More efficient use of energy resources through waste reduction.

Kilovolt (kV) 1,000 volts.

Kilowatt (kW) 1,000 watts.

Kilowatt-hour (kWh) Unit of measure equal to one kilowatt of power supplied to or taken from an electric circuit steadily for one hour. Equivalent to ten 100-watt light bulbs burning for one hour.

Load Amount of electric power or energy consumed by a particular customer or group of customers.

Megawatt (MW) 1,000 kilowatts.

Public Utilities Board (PUB) Regulatory body of the Province of Alberta which is responsible for consumer rates and approvals to issue securities.

Rate base The value established by the regulatory authority, upon which the utility is allowed to earn a specified return.

Rate of return The ratio of the allowed operating income to the specified rate base, expressed as a percentage.

Substation Electrical facility for changing and controlling the voltage of incoming and outgoing circuits.

Thermal A term used to identify generating plants using heat to generate electricity. Coal is burned to provide heat for some of TransAlta's plants.

Transmission Process of moving electric power in bulk at higher voltages from the source of generation to distribution or load centres.

Watt Unit of measuring electric power or the rate of doing work. One horsepower equals 746 watts.

