

ALASKA LEGISLATURE SPECIAL COMMITTEE/SUBJECT FILES 8672

2505 SCOMM 109: JNT. COMM. ELEC. UTILITY RESTRUCTURING, 1998

III SCOPE OF SERVICES:

The Legislature and the APUC have determined to seek the aid of an outside consultant. The consultant will perform all work necessary to:

- Conduct an economic assessment of the risk/reward, cost/benefit and impacts of wholesale and retail competition in Alaska
- Formulate positions on issues relevant to electric industry matters in Alaska
- Contrast the differences among Alaska, the Lower 48 states and other countries from an electric utility perspective and then evaluate which benefits and risks might accrue should various restructuring scenarios evolve from legislative or regulatory efforts.
- Review and compare benefits/advantages/status of restructuring efforts in other states and countries - how effective have they been to date, how well have the efforts been received by suppliers and customers? Which features would be a liability to Alaska?
- Incorporate, but not duplicate the results of APUC Docket U-97-140, specifically the Black & Veach study.
- Review the current electric system to determine the generation available, the market structure for the sale and purchase of electricity and how the system is currently operated.
- Become familiar with the sensitive economic balance prevailing in each of the isolated satellite utility system communities throughout rural Alaska.
- Become familiar with the engineering, operation, financial and regulatory conditions attending the current electric industry structure in Alaska.
- Assess Alaska's unique situation regarding transmission grid.
- Assess competition potential on the wholesale level and what percent of eventual savings to consumers will result from this competition.
- Assess competition potential on the retail level and what percent of eventual savings to consumers will result from this competition.
- Identify and analyze alternatives for addressing the conditions, issues and factors examined from multiple perspectives including, but not limited to current and anticipated industry engineering and operational parameters, first and continuing/operating costs, consumer welfare and impact, public interest benefits, public "goods," potential regulator issues (state, federal, electric and other), and other matters related to electric industry restructuring. The consultant is expected to draw upon the restructuring experiences of jurisdictions outside of Alaska and to integrate such experiences on a comparative basis for further reference and evaluation.
- Review cooperative nature of ownership of Alaska utilities with the people owning nearly all of the utilities either on a cooperative member basis or a municipally-owned basis - and its impact on restructuring.
- Assess impact and benefits that may accrue as result of restructuring, including changes that may eliminate or decrease the State subsidy provided under the Power Cost Equalization program.
- Assess how to deal with current long-term power purchase contracts (wholesale contracts).

- Assess State's exposure on Four-Dam Pool, and other power generation and transmission lines, and contractual obligation State has to these projects.
- Describe investments in Alaska that may be stranded by competition and how to recover same.
- Assess impact of State's ownership of some major transmission facilities and what impact would be on the state.
- Assess how to preserve reliability and safety under competition scenarios.
- Assess possible handling of peak period load times (particularly in the winter) and how these times would be addressed under competition.
- Assess low-income protection, universal services provisions, including provider of last resort, and obligation to serve and how these should be structured.
- Define and assess potential problems related to cherry picking.
- Assess potential for winding up with one major player in the area.
- Assess whether pilot program would work in Alaska, or in specific areas.
- Suggest how a pilot program might be structured so that meaningful data will be available at the end of the program.
- Assess the issue of how to educate consumers under any restructuring plan and the anticipated cost of such a program.
- Assess any potential restructuring problems with tax-free and municipal bonds and/or outstanding federal loans.
- Assess tax implications facing local and/or state government.
- Assess anticipated costs of instituting restructuring on state government.
- Assess anticipated costs of restructuring on local governments.
- Assess potential bottom line for consumers, what percent of eventual savings to consumers will result from each of the options.
- Assess how to deal with current long-term power purchase contracts (wholesale contracts). Assess which contracts will result in stranded costs for energy suppliers and utilities. What wholesale competition can exist within the existing wholesale contracts.
- Assess role of APUC in restructuring.

As directed by the State, produce a final and comprehensive written report reflecting the processes of the above requirements. The final report should include written analyses, publishable reports, and ancillary materials, all of which become the property of the State of Alaska. The contractor shall assemble and consult with a peer group, whose members are not employees, contractors, or otherwise connected with the consultant, regarding the written report. The State shall approve all members of the peer review team. The contractor shall provide the State with a copy of written remarks from members of the peer group and background information on each member of the peer group. As a part of the contract, the consultant must be available to present the report to the Joint Committee, and to testify before the Joint Committee and other committees of the Alaska Legislature on this matter through December 1999.

IV. Consultant Capabilities

When evaluating responses to its solicitation, the State will consider demonstrated capabilities and skills in the following areas, among other matters:

- **Neutrality:** Consultant must be neutral on the issue of electric utility restructuring (no published points of view or lobbying contracts advocating or opposing restructuring).
- **Alaska Hire:** Consultant should be open to considering partnerships with Alaska businesses (if not an Alaska business) and be licensed to do business in Alaska.
- **Analysis:** Consultant must have sufficient resources (personnel, software and hardware) to effectively process, analyze and evaluate significant amounts of raw data. Multiple sources of data may be offered and disparate forms, protocols, etc., can be anticipated. Some data may be proprietary, confidential or otherwise privileged in source or character, requiring the ability to handle such data in a conforming manner and to effectively control and limit the exposure or dissemination of such data.
- **Experience:** The State seeks a consultant with experience in electric industry matters, generally, and with knowledge of the current condition of restructuring elsewhere. Economic or engineering experience is helpful, but not mandatory. The consultant must be familiar with all aspects of policy formulation, from data gathering, to data analysis, to evaluation, to policy development and exposition.
- **Presentation/Support:** A written, publishable report will be a required deliverable of the contract, in sufficient quantities and forms necessary to achieve the objectives. The report shall also be provided in Adobe Acrobat electronic format for distribution on the WEB. Additionally, support of the published report in terms of public or private presentation, explanation, or testimony before the Joint Committee or other committees of the Legislature is also required. The State reserves the right to make as many additional copies of the report and supporting documentation as it deems necessary (NOTE TO COMMITTEE: THIS SEEMS IRRELEVANT IF THE STATE GETS POSSESSION OF THE REPORT AND ALL ANCILLARY DOCUMENTS - See Previous page)
- **Availability:** The consultant must be readily available to the Legislature and the APUC during the course of the project for discussion and advice. This includes formal and informal meetings and may involve consultation with the Joint Committee from time to time. The consultant may be required to interact with individual legislatures, but will not be required to engage in individual member's projects or other matters outside the scope of this contract. The consultant must be free of conflicts of interest at inception of work on this project and must remain so at all times until after termination of the contract.
- **Timeliness:** The anticipated magnitude of the work effort and the limited, defined time period available to respond to the scope of the contract, places a premium on responsiveness to schedule. The consultant will be expected to meet all deadlines and milestones established without sacrificing the accuracy, completeness and quality of the work product.

- **Subject Matter Expertise:** The consultant must be familiar with the technical aspects of the engineering, operations, and financial aspects of the electric utility industry, including generation, transmission, distributions, and energy/ancillary services. Additionally, familiarity with emerging technical, operational and financial issues (e.g., ISO functionality, securitization, power marketing, etc.) is required.
- **Consumer Education:** The consultant will provide the Legislature and the APUC with suggestions for conducting consumer education campaigns designed to inform Alaska consumers about electric utility restructuring.

V. OWNERSHIP:

The ownership of the work product and all documentation and ancillary documents accomplished under this contract rests with the State of Alaska.

VI. SELECTION PROCESS:

Responses to this request for proposals should be made in writing and directed to the following:

(Policy call for the Jt. Committee and the APUC)

Consistent with the matters discussed above, the State intends to rapidly evaluate providers of consulting services. Accordingly, early and complete submissions of interest would be appropriate. A committee comprised of members of the Jt. Committee and the APUC will review qualifications of prospective bidders and then request those bidders to submit a full response to the RFP. Those responses should address the matters set out above, particularly those items detailed in Sections II, II and IV.

Five(?) copies of the response to this request for proposals must be submitted by _____, 1998. Responders are welcome to submit a complete response, but the committee will initially only consider whether the respondents are qualified to conduct the study.

Any response, to be considered, must be signed by a duly authorized representative of the consultant and must be valid for a period of 30 days following transmission to the above.

Interviews or negotiations, if any, will be conducted only with a potential consultant or consultant's representative legally authorized to represent and to bind the consultant.

End of Document

08/28/1998 14:53

9074795290

AK ENERGY ASSOC

PAGE 02



★ Alaska Energy Associates

126 Boaters Lane
Fairbanks, Alaska 99709

August 28, 1998

Sen. Loren Leman
716 W. 4th Ave, Suite 520
Anchorage, AK 99501-2133

RE: Electric Industry Restructuring Study

Dear Sen. Leman

We appreciate the opportunity to provide these comments on the content of the proposed study. Alaska obviously has very unique conditions in this area not found in the lower 48 states where this process has been going on for some time. The largest obstacle there has been the stranded costs issue, which is virtually non-existent here. We are cautiously optimistic that an open market could result in lower utility costs for all Alaskan rate payers.

We would request that any study looking at a new paradigm for the electric utility industry be statewide and not limited to the Railbelt. We think that a study should review market potential for independent power producers wherever there are opportunities to provide electricity at a lower cost.

We also strongly feel that any restructuring be developed in accordance with the following principals adopted by the National Association of regulatory Utility Commissioners in July of 1996:

NARUC Principles to Guide the Restructuring of the Electric Industry, July 1996
Reliability

Safety, reliability, quality, and sustainability of electric service should be maintained or improved in a restructured electric system

Customer Choice

Consumers should have the opportunity to make informed choices among providers and services. It is for the States to determine the extend of and pace for expanding choice for consumers under their regulatory oversight

Universal Service

Universal service at reasonable rates, including adequate protections for low-income customers, should be maintained

Public Benefits

The public benefits of energy efficiency, renewable resources technologies and research and development should be maintained through existing or new mechanisms.

Stranded Costs

Existing commitments of utilities arising from past decision made pursuant to historical regulatory and legal principles should be addressed in a fair and reasonable manner by States

Phone / Fax : 907-479-5290

e-mail: Relaxwell@aol.com

Sen Loren Leman
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Consumer Protection

Consumers should be protected from anti-competitive behavior, undue discrimination, poor service and unfair billing and disconnection policies

State Decisions

States and State commissions should determine retail electric policies, including restructuring policies

Environment

Structural changes to the electric industry should maintain or improve the quality of the environment.

PUHCA

Changes to PUHCA should be maintain in the context of broader industry changes. Regulation should be reduced only as competitive becomes effective at preventing monopoly abuses.

PURPA

PURPA should be reformed generally consistent with the following: goals of PURPA should be affirmed; mandatory purchase requirements not applicable for utilities in a State that has determined acquisition of generation is subject to competition

Shared Benefits

All classes of customers should benefit from improvements due to structural changes in the industry.

Public Participation

Industry restructuring policies should be developed in public processes with participation open to all

Thank you again for this opportunity to provide comments.

Sincerely,



Robert A. Maxwell

AUG-28-98 SAT 3:40 PM
AUG-28-88 FRI 15:51

SENATOR LOREN LEMAN
ALASKA RURAL ELECTRIC

FAX NO. 5815547
FAX NO. 5815547

... F. 1



ARECA

Electric Service for 357,000 Alaskans

Alaska
Rural
Electric
Cooperative
Association, Inc.
703 W. Tudor Rd., #200
Anchorage, AK 99503-6030
(907) 561-6103
FAX (907) 561-3547

August 27, 1998

Senator Loren Leman
Alaska State Legislature
716 W. 4th Avenue
Anchorage, AK 99501

Post-It® Fax Note 7871		Label 2	Label 2
To	Sen Leman	From	Eric Leland
Co-Recpt.		Co	ARECA
Phone #		Phone #	
Fax #	251-37168	Fax #	561-5547

Dear Senator Leman:

You have requested input regarding the proposed Request for Proposal (RFP) for the Electric Utility Restructuring independent study. I appreciate the opportunity to respond. As an addition to this letter, you will also be receiving input from Dr. Peter Fox-Penner on behalf of ARECA.

As you are aware, ARECA presented the Legislative Subcommittee with a proposed RFP for your consideration. This is a proposal that the utility industry was considering executing, but we ultimately concluded that such a study may be better conducted by a third party such as the Legislature or the APUC. We also endorse the concept of a joint effort by the Legislature and the APUC as well. We would certainly encourage the use of our proposed RFP for the independent study, but also encourage its use as a basic framework within which to include relevant input from all of the stakeholders.

In addition to our proposed RFP, we would like to reiterate our desire to see the Legislature adopt a set of principals that would guide the restructuring process. If we can agree on the principals, then I think that the results of the ultimate study stand a much better chance of attaining universal support. Principals that the electric utility industry would like to see adopted are as follows:

- Alaska's unique features must be considered: small market size, lack of interconnection, consumer-ownership
- Uniform standards must be developed and applied to all energy providers
- Exclusive distribution service areas must be maintained to prevent duplication of facilities and protection of the consumers
- Universal access to affordable electric service should remain a primary goal
- Stranded costs must be addressed
- The issue of wholesale contracts must be addressed

Although Dr. Fox-Penner's letter will more fully address the study process, I would like to encourage the adoption of a peer-review panel to ensure that the study remains balanced and considers the input of all stakeholders.

DEMOCRACY IN ACTION

AUG-28-98 SA. 3:40 PM
AUG-28-98 FRI 15:52

SENATOR LUKEN LEMAN
ALASKA RURAL ELECTRIC

FAX NO. 9074055573
FAX NO. 5615541

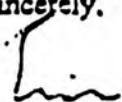
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RFP letter to Sen Lemman
8/27/98
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Finally, given the complexity of the issue and the potential impact that may accrue, particularly in the Anchorage area, I would encourage the Legislative Subcommittee to adopt a considered approach to the issue at hand and to not be averse to making a recommendation to the next Legislature that specific restructuring recommendations be held in abeyance pending completion of the study. I am particularly concerned about AML&P's ability to freely compete and the potential impact that open competition may have on the \$300,000,000 in bonded indebtedness of the utility. Given the nature of AML&P's customers, I don't think that it would take much to "tip the scales" and start a rapid downward spiral. We then might end up with cheap electrical rates, but high taxes to preserve our credit rating.

Please call upon me if ARECA can be of further assistance in the RFP process.

Sincerely,



Eric P. Yould
Executive Director

cc: Dr. Peter Fox-Penner
Sam Cotten
Rep. Rokeberg
Sen. Sharp

The Brattle Group

*Economic,
Environmental &
Management Counsel*

CAMBRIDGE

WASHINGTON

LONDON

August 26, 1998

VIA FACSIMILE

Senator Loren Leman
Alaska Legislature
State Capitol
Juneau, Alaska 99801

Dear Senator Leman:

In this letter I provide my thoughts on a possible means of structuring an analysis of the comparative costs and benefits of retail electric competition in Alaska. As I said when I appeared before the Joint Committee on Restructuring ("JC"), I applaud the legislature's desire to study this in a thorough and objective fashion. As I also noted, a study of this nature is an extremely ambitious undertaking for any state, and will require many months and hundreds of thousands of dollars to perform correctly. Upon reflection, my thesis in this letter is that the study should be done in several distinct stages to improve both the quality of the research and to obtain all-important buy-in from critical stakeholders.

Changing the electric industry's structure is an enormous undertaking, with extremely long-lived and difficult-to-foresee impacts. Long-range forecasts will be accurate only under the best of circumstances, and only then when many assumptions and modeling approaches turn out to be accurate. Nonetheless, as the EIA report I passed out at the hearing proves, analysts are forecasting industry structure and prices as far out as twenty years.

Every good study must begin with a carefully formulated objective. In this instance, I suggest a study objective something like the following:

The objective of this analysis is to compare, according to a set of criteria carefully specified in advance, several well-specified scenarios that describe alternative future structures of Alaska's electric utility industry. In this context, industry "structure" includes the number, type, and organization of the firms involved in all portions of Alaska's electric supply, as well as the state laws and regulations governing these firms.

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Note that this objective embodies several ideas. First, it is necessary to specify the criteria that will be measured in the study. Are we concerned only with the future average level of electricity prices, or is it important to understand the time profile of prices each hour and price differences between customer classes? Is it important to measure the impact of restructuring on job creation or economic development, and if so, how should it be quantified?

I therefore suggest that the first phase of the effort be the development of specific criteria that will be used to compare industry scenarios. The study will be much more useful if the Joint Committee members, its Alaska Public Utility Commission (APUC) partners, and key stakeholders, understand how each criterion used to evaluate scenarios will be defined and measured. The science of measuring most of the impacts of electric restructuring is still evolving, and many methodological issues are themselves controversial. For example, measuring the impact of restructuring on important public goods -- universal service, reliability, energy efficiency and renewable energy, and environmental improvement -- can be difficult. For each criteria, I recommend that agreement be reached before the main study is scoped and the RFP issued, as no competent researcher will be able to estimate their cost of performing the research well without such information.

In attachment 1, I provide a preliminary list of possible evaluation criteria and make observations as to definition and measurement options. However, these are only suggestions. Selection of the criteria by which the Joint Committee evaluates industry change is one of the most important decisions the Joint Committee will make, and it is a decision to be made by elected representatives of the people.

As noted above, I recommend that these important decisions be made prior to the final scoping and issuance of the main study RFP. However, the process of understanding and evaluating the methods of measuring the kind of impacts set forth in attachment 1 requires significant work, probably more than can be done by the limited staff available to the JC and APUC. I therefore suggest that the Committee and its APUC partners proceed with what the consulting industry calls a scoping study. This preliminary study would pay a research firm to search the literature and develop a list of criteria similar to attachment 1 and present alternative definitions and measurement methods for each criteria, with a discussion of the pro's and con's of each measurement approach. The scoping consultant should understand the ultimate objective of the main study, and should be instructed to estimate the impact of alternative measurement approaches on the cost of the ultimate study.

As an example, there are many alternative ways of gauging the impact of restructuring on Alaska's environment. You may wish to limit the assessment of environmental impacts to air emissions, which is not uncommon. Even then, measuring the impact of air emissions changes can employ any of several approaches: quantification of differences in criteria pollutants, economic measurement using damage functions, particular focus on localized air quality issues

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such as ground level ozone or particulates, or some other approach. These approaches will require significantly different levels of effort in the ultimate study, and will also help encourage only those bidders with the requisite skills to bid on the final study.

An additional advantage of proceeding with this scoping study is that it will allow the JC and others to learn much about how studies of restructuring are conducted. An early introduction to the jargon, methods, data, and assumptions researchers use will greatly improve the JC's understanding of the final report.

The second element embodied in the overall study's objective is the creation of what I would call the study's framework, i.e. the key assumptions and parameters the JC wishes to specify in advance as guidance to the researchers. Before going any further, allow me to discuss the concept of framework a bit more carefully.

Every study has a time horizon and a geographic scope, and these are the primary foundations of a study framework. For a study of industry structure, it will also be necessary to create a large set of assumptions and scenarios in order to explore the subject properly. For example, one key assumption will involve the technical performance of distributed generation technologies. Will they become reliable and cost-effective five, ten, or twenty years from now? Similarly, will natural gas prices rise, fall, or remain steady relative to the rate of inflation in Alaska?

In attachment 2, I provide a list of assumptions that are likely to be important in the study and some observations on the usual ranges these assumptions can cover in studies of this nature. The list is somewhat long, and the Committee probably will want to examine the impact of many of these assumptions on study results. This presents a critical issue in the design of the study's framework.

For each element in Attachment 2, and perhaps others the Committee wishes to add to the list, the Committee must decide whether a single assumption will do or whether a range is to be explored. I suspect there will be some of both.

Where a single assumption is sufficient, this assumption becomes part of the study framework, and should be communicated to bidders as part of the RFP for the study. Where a range of assumptions is needed, this too must be decided and communicated, but the effort does not end there.

Suppose a study has three key assumptions to make, each of which can take on three values. All other assumptions are fixed. Suppose we define a "scenario" as any unique combination of these assumptions. If each scenario produces a different final answer with respect to the criteria for judging the outcome of the study, we may want to perform a complete analysis of

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nine scenarios.

Due to the long time period involved and the difficulty in predicting the results of industry structures, I cannot rule out the need to examine multiple scenarios for the Alaska utility industry. I simply don't know enough to determine whether the impacts of possible restructurings in your state, judged according to the methods and criteria set forth in the scoping study, will change depending on the factors in Attachment 2 for which I suggest ranges.

If the Committee decides that multiple scenarios need to be examined, then it must consider whether and how to limit the number of scenarios in the ultimate study. Generally speaking, I think there are two approaches. The first is to specify a matrix of scenarios much like the simple example above: for each key assumption, specify the number of cases to be run against every other combination of assumptions. This produces a lot of material to digest, but it has the advantage of illuminating precisely which assumptions turn out to influence important outcome criteria and which do not.

The second approach is to create several pre-selected *scenarios* for analysis and discard many of the rest, limiting the study to a careful comparison of a few cases rather than a global exploration of all possible future states of nature. For example, you might consider creating the following six scenarios:

0. Reference Case: no change in any policies or laws.
1. Incremental Retail Improvement. Continue with APUC regulation and customer ownership at retail, but add incremental improvements.
2. Incremental Retail Improvement Plus Open Access. Same as scenario one, but with improved wholesale open access policies made to emulate world class best wholesale open access.
3. Scenario 2, with partial retail choice in the railbelt.
4. Scenario 2 with complete retail choice in the railbelt.
5. Scenario 2 with complete statewide retail choice.

Creating scenarios with these descriptions immediately raises questions as to what's in them. What, for example, do we mean by incremental improvement in Scenario 1, or by "partial"

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retail choice?

Believe it or not, one of the most important advantages of the creation of these scenarios is that it forces all stakeholders to work together to define scenarios thoroughly enough that:

- everyone understands in advance what exactly is being examined;
- everyone agrees that these alternatives represent outcomes that could occur, whether or not they are desirable;
- stakeholders will gain a far greater appreciation of the number of decisions and assumptions inherent simply in formulating a scenario to be studied, and make these decisions and assumptions themselves, rather than having researchers do this largely at their discretion.

As with the specification of criteria, scenario development is a substantial task unto itself, and also merits engaging the services of a consultant in a scoping study or perhaps delegating this task to the APUC. Here the consultant's objective would be to interview each of the key stakeholders in Alaska, including members of the JC and the APUC, examine the literature, and facilitate a small series of workshops in which the participants flesh out a series of scenarios that will be included in the RFP. Realistically, this will take several months however you choose to do it.

Upon completion of the two scoping efforts, the stage is set for a thorough and objective analysis. The benefits of the scoping studies will be realized not only in the knowledge and "buy-in" among policymakers and stakeholders, but also in the fact that the final RFP for the full study can be written with far greater specificity. In effect, the final RFP will ask for bids to compare the agreed-upon set of scenarios according to criteria and methods set forth in the first scoping study. I believe consulting experts bidding on this basis will be able to more accurately gauge the work, build research teams that can perform the work well, and will produce the most usable product at the best price if this overall approach is employed.

I recognize that what I have outlined here is more than a one-shot RFP for a one-shot study. Although the process I suggest here is more complex, and could take a little more time, I believe the results will repay the effort.

Finally, here are a few administrative suggestions that accompany my proposed study outline. First, the scoping RFPs should specify whether the entity that performs the scoping study is eligible to perform the final study. There are pro's and con's to either alternative, but decide this in advance. Second, if Alaska procurement rules allow it, accept the next-to-lowest bid, not the lowest. Third, I would not require an Alaska firm to be a part of the bid. I think there are many firms outside the state that can do an excellent job, and you should go for highest

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August 28, 1998

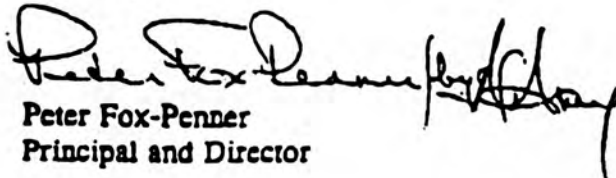
quality.

My final and most important administrative plea is make sure that you engage a panel of recognized, independent experts to serve as paid peer reviewers for the study. The peer review panel need not be large, but it should incorporate a variety of views, and it should be contracted independently by the JC and the APUC, and report directly to them. Keep in mind that the group doing the ultimate study will want to interact with the peer reviewers periodically from the outset of their effort, not just after the study is completed. Both the peer reviewers and the study performers should budget for pre-scheduled periodic interactions from the study outset.

As I noted during the hearing, in the interests of preventing even the appearance of a conflict, the Brattle Group hereby recuses itself from bidding on either the scoping studies or the final study. However, with the consent of ARECA I would be happy to help develop the RFPs and study plan further and/or serve as one of the peer reviewers.

I very much enjoyed my brief trip to Alaska and the congenial atmosphere at the Joint Committee's hearing. I sincerely hope the Committee is successful in its mission to conduct a careful, unbiased look at one of Alaska's most important and complex industries.

Sincerely,


Peter Fox-Penner
Principal and Director

cc: Eric Yould, ARECA
Sam Conon, Chair - APUC
Representative Norm Rokeber
Senator Bert Sharp

PFP:mg

The Brattle Group

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August 28, 1998

Attachment 1

Preliminary Suggested Possible Criteria for Evaluating the Impacts of Electric Utility Industry Structural Change (all measured over the study's time horizon)

1. Industry Structure Impact — Likely number and type of entities functioning in each stage of the industry

Measurement: descriptive and qualitative (but see no. 2 following)

2. Price and Bill Impacts

- A. Impact on average prices by time of day, season, load factor, and customer class
- B. Impact on average bills

Quantitative, though possibly not based on a single calculation or model, but rather on literature searches and actual results observed in similar situations.

3. Impact on Reliability

- A. By industry stage (generation, transmission, distribution, unbundled retail services (if any)).
- B. By customer class

Same as No.2

4. Impact on Public Interest Objectives

- A. Energy efficiency
- B. Fuel mix and diversity
- C. Renewable energy
- D. Low-income customers
- E. Universal Service
- F. Technological Advancement
- G. Environmental Protection

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- a. Air emissions, localized and state or national
- b. Water
- c. Land use/disposal

Measurement notes: All except G are same as 1 and 2 above; G should be quantitative and analytical.

5. Transition Costs

- A. Generation Stranded Costs, by entity existing today
- B. Transmission and Distribution Stranded Costs, by entity existing today
- C. Customer Education and associated costs
- D. Increased Costs of Regulatory Institutions

Measurement notes: A and B can be estimated from Alaska-specific stranded cost models; C and D estimates similar to 1 and 2 above.

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Attachment 2

Key Assumptions and Scenario Parameters - Preliminary Suggestions

Assumption or Parameter	Comments
Time Horizon	Accuracy diminishes dramatically as period extends; suggest 5-15 years.
Inflation and Real State Product	Set single consensus assumptions; results probably not sensitive to these parameters.
Interest and Discount Rates	Pick two or three values as parameters; may or may not be important
Fuel Prices	Probably worth doing high/medium/low scenarios
Technology Parameters (For each major generating technology, including DG; capital cost, operating costs, heat rate, environmental performance, etc, over time)	Probably very critical. Alternative assumptions available for many technologies from Energy Information Administration or Electric Power Research Institute, as well as private sources.
Demographic and Geographic Development Patterns in Alaska	?
Tax Treatment of Public Power Investments	?
Tax Rates for Public and Private Alaska Industry Participants	?
Electricity Demand and End User Technology Development	Readily parameterized by variables such as average use per customer, typical load profiles by customer class and price elasticity by time period and customer class.

The Brattle Group



Homer Electric Association, Inc

Corporate Office
3977 Lake Street
Homer, Alaska 99603-7680
Phone (907) 235-8551
FAX (907) 235-3313

Central Peninsula Service Center
280 Airport Way
Kenai, Alaska 99611-5280
Phone (907) 283-5831
FAX (907) 283-7122

August 28, 1998

The Honorable Senator Loren Leman
716 W. 4th Ave., Suite 540
Anchorage, AK. 99501-2133

Dear Senator Leman:

Re: Investigation of Electric Utility Restructuring in the State of Alaska

Thank you for the opportunity to comment on the scope of study undertaken to examine the feasibility and desirability of restructuring the electric industry in Alaska. This is a subject of vital importance to all electric utility consumers in the state. We urge a careful and deliberate approach to this subject to ensure that all views and relevant points are examined before any recommendations are formulated for possible action.

In brief, the following points should be considered:

- Industry restructuring policies should be developed through public processes with participation open to all interested parties.
- The investigation should recognize the uniqueness of the Alaska electric utility industry. One size will not fit all.
- Evaluate the realistic level of competition available to consumers in all segments of the market and potential for abuses of market power.
- All classes of consumers should benefit, or at least not be harmed by, structural changes in the industry.
- Review the status of restructuring efforts by other states that are further along in the process. Evaluate their effectiveness, benefits and problems.
- Review the current regulatory processes in the state and their changing roles in any restructuring plans.
- Review the environmental effects of any restructuring plans.
- Evaluate stranded cost issues and possible solutions.
- Include results of the present Power Pooling study recently completed by Black and Veatch under guidance of the APUC.

It is understood that this investigation and subsequent report and recommendations are intended to be a basis for legislative action during the 1999 session. This makes for a rather short schedule for a subject of this importance, complexity and breadth to be addressed.

The Honorable Senator Loren Leman
August 28, 1998

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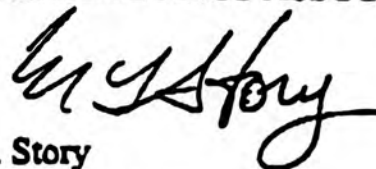
We would recommend an interim report at the beginning of the session outlining the progress to that point in time and laying out a schedule for completion of the project. We would urge that adequate time be allowed for a thorough investigation and deliberation, even if it means not finishing in time for legislative action during the 1999 session.

This subject is simply too important to risk hasty actions that have the potential to cause major problems and costs if not implemented properly.

We appreciate the opportunity to provide comments on this important subject and stand ready to assist in pursuing this project to a successful conclusion.

Sincerely,

HOMER ELECTRIC ASSOCIATION, INC.



N.L. Story
General Manager

C: Sam Cotton APUC
Eric Yould ARECA

F:\GMNLS\98\LTR\LEMAN\LTR\tr

International Brotherhood of Electrical Workers

Local 1547

2702 DENALI STREET
ANCHORAGE, ALASKA 99503-2779

TELEPHONE DISPATCH FAX
(907) 272-6571 (907) 276-1547 (907) 276-1963

JOSEPH J. HENNING
BUSINESS MANAGER • FINANCIAL SECRETARY

ANDREW ANDERSON
PRESIDENT



August 24, 1998

Representative Norm Rokeberg
PO Box 221721
Anchorage, AK 99502-1721

Dear Representative Rokeberg,

I am writing today in response your request for specific criteria recommendations for a deregulation study now being contemplated by your Task Force and the APUC. The IBEW is concerned that the working title we have heard for this study; "the effects of deregulation in Alaska" implies that the policy question of **whether to proceed with deregulation** has been replaced with **how to proceed with deregulation**. In part this can be attributed to the lack of clearly articulated opposition from the Alaskan utility community.

The reticence on the part of the utilities can be in part ascribed to the perceived public relations dilemma that would presumably befall the utilities that took an anti-deregulation stance. Rather, hoping to avoid being labeled anti-choice, the majority of Alaskan utilities have crafted cleverly ambivalent position statements that are followed up with detailed reasons to oppose deregulation of the electric utility industry in Alaska.

The IBEW feels no such compunction and forthrightly opposes deregulation in Alaska. We would further caution the committee that assuming consensus on this issue misreads the position of the utility community. As you yourself have repeatedly cautioned, any legislative approach must enjoy the support of all the stake holders, or the very nature of this complex issue will cause it to fail if opposed by any sector.

Notwithstanding the above comments, we would urge the following criteria be included as policy questions that must be included in any study addressing changes to the currently structured utility industry in Alaska:

Representative Rokeberg

Page 1 of 3

August 24, 1998

PROUDLY SERVING 586,000 SQUARE MILES ON TOP OF THE WORLD

Any restructuring of the electric utility industry in Alaska should not proceed without guaranteed lower rates for residential and small business consumers. Is this possible, and what is the probability of attracting new competitors to the marketplace?

Equitable benefit of any restructuring must ensure that rural, remote and less profitable customers are not adversely impacted. What assurances for universal access would be required as a result of restructuring in Alaska?

Restructuring should not proceed until stranded cost and debt recovery issues are adequately addressed so that all classes of consumers benefit equally, those remaining on the system as well as those leaving the system.

Because of our extreme weather conditions, power outages that last for days and even weeks at a time are unacceptable and consumers must be protected from unreliable service. What regulatory protections would be required to insure no system reliability compromise and no unacceptable interruptions of service?

Safeguards for worker and public safety and strict reliability standards must be built into any restructuring scheme in order to protect the public's best interests. What are the implications of such regulatory requirements?

If the Alaska market is deregulated, what regulatory provisions should be enacted to protect the market from giant holding companies and mergers, in order to avoid a reduction in the number of service providers and the elimination of meaningful choice?

Will electric utility restructuring result in compromised response time, maintenance standards, and system reliability through workforce reductions. Estimate the cost of providing adequate provisions for voluntary severance or retirement options, job retraining and outplacement assistance for adversely affected utility employees.

Safeguards should be enacted that ensure energy efficiency, and clean energy technologies. How can these important issues be addressed through regulatory reform?

As you can see by this list, the concerns that must be mitigated before any meaningful restructuring of the electric provider industry in Alaska should be undertaken are vast, we would submit, if not insurmountable, at least do not meet the cost/benefit test.

I remain, as always, ready to answer any questions you may have about this very important issue and stand ready to provide your committee with any information or research you may find necessary.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Brooks", written in a cursive style.

Gary Brooks
Business Manager

GB/cea



www.aurorapower.com

August 24, 1998

Senator Loren Leman, Chairman
Subcommittee, Joint Committee on Electric Utility Restructuring
Alaska State Legislature
716 West 4th Avenue, Suite 540
Anchorage, Alaska 99501-2133

AUG 24 1998

Dear Senator Leman:

At the August 18th meeting of the Joint Committee on Electric Utility Restructuring, Representative Norman Rokeberg requested that we provide your subcommittee with key issues to be examined during a joint study by the Legislature and APUC.

Aurora Power would like to offer the following recommendations for the study:

- **PILOT PROGRAM**

Allow a limited scope and limited time frame pilot program to be initiated to the Anchorage area. This pilot program would accompany the study to provide actual data on technical issue resolution, utility coordination and customer satisfaction back to the decision-makers.

- **CUSTOMER PROTECTION**

Develop Customer protection rules by the APUC. This is a fairly straightforward recommendation to be incorporated as part of the study. Currently Michigan has an extensive docket U-11290 that addresses Customer Focus Issues and Recommendations. Many of the issues and concerns that were raised in the two hearings, as well as the ARECA conference have already been addressed in this document. The staff of the Michigan Commission recommended that the Commission or Legislature consider developing a formal summary of those rights essential to electric consumers. The list would be used as the foundation for guaranteeing consumer protection for all electric consumers. (Copy Attached – Electric Consumer Bill of Rights)

- **SUPPLIER OF LAST RESORT**

Each of the states (California, Maine, Massachusetts, Montana, Nevada, New Hampshire, New York, Pennsylvania, Rhode Island, and Vermont) that have adopted or are implementing restructuring programs have provided for a "supplier of last resort." This has been accomplished by establishing a default service or a standard offer provision, or both. In each of these states, the Distribution Company is required to provide basic service to all customers in its service territory:

- 1) Who choose not to contract directly with a supplier;
- 2) Who cannot obtain power in the open market; or
- 3) Whose supplier fails to provide generation service.

The objective is to ensure that no customer goes without electricity.

Customers not electing the option to choose an alternative supplier for power generation may retain total service from their host utility. If the customer chooses to remain sales customers of the existing utility, they will not be harmed by the change brought about by restructuring.

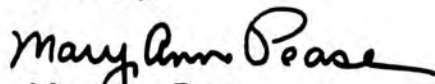
- **OBLIGATION TO SERVE**

For transmission and distribution service, the obligation to serve remains relevant in a competitive generation market since it is expected that these will continue as natural monopoly functions. The natural gas industry moved through a similar transition in the 1980's. In that industry, the issue was resolved by restricting the utility's obligation to serve to those customers who choose an alternative supplier. In those instances, the utility maintains an obligation to deliver the gas the customer procured, but is under no obligation to procure new or additional supplies for the customer. A similar approach could be applied to electricity. Under this approach, the obligation to serve, which by historical definition includes the requirement to supply electricity, would be changed to the "obligation to connect" and deliver electricity for those customers who choose an alternative generation supplier. The utility would no longer be under an obligation to procure and sell electricity to such a customer although it could if it chose to do so.

Aurora Power believes that the aforementioned issues are important implementation decisions to be resolved by the APUC. The list of issues that need to be studied could become quite elongated if a company were to follow the goal of postponing Customer Choice for as long as possible. Aurora's intent is to keep the process simple and enable customer choice in a timely and beneficial manner. The decisions made by the APUC, which will hopefully include implementation of pilot program, will benefit the consumers and provide a valuable stepping stone to full retail wheeling in the Railbelt.

Thank you for your time and consideration of this matter.

Sincerely,


Mary Ann Pease
Vice President

Cc: Rep. Norman Rokeberg
Senator Bert Sharp
Senator Robin Taylor
Senator Al Adams
Rep. Alan Austerman
Rep. Fred Dyson
Rep. John Davies

Electric consumer Bill of Rights

1. **Right to Know** – Customers should be assured access to free (or easily affordable) and accurate information and education materials, which enable comparison of price, quality, supplier service records, and terms of service offered.
2. **Right to Choice** – Customers should have the ability to choose from among service providers competing in an open market. All customers should have the ability to aggregate efficiently on a nondiscriminatory basis.
3. **Right to Fair Dealing** – All classes of customers should have access to choices and pricing options without discrimination.
4. **Right to Redress** – There should be a neutral, prompt, effective, no-cost or low-cost forum for resolving customer complaints against electricity suppliers, aggregators, and distributors.
5. **Right to Privacy** – Consumers should be able to control release and use of sensitive personal information and records. Marketing should not be unduly intrusive.
6. **Right to Service Quality** – All choices offered to customers should meet minimum safety standards and service criteria, and must fulfill advertised terms and conditions. Unreasonable terms and conditions (e.g. blanket requirements for service limiters) should not be forced on any customers as a precondition for providing service.
7. **Required Code of Conduct and Oversight** – All suppliers and aggregators should meet minimum standards for certification as a condition of market entry and adhere to a standard code of conduct.
8. **Right to Universal Electric Service** – Electric service is a basic necessity, which should be accessible to all residential consumers/properties. Universal service includes the right to firm generation, transmission, and distribution services, and such metering as is necessary to allow customers to participate fully in a competitive power market.



CHUGACH ELECTRIC ASSOCIATION, INC.

EUGENE N. BJORNSTAD, P.E.
General Manager

August 27, 1998

Senator Loren Leman, Chair of the Study Subcommittee
Through Representative Norman Rokeberg, Co-Chairman
Alaska State Legislature
Joint Committee on Electric Utility Restructuring
716 West 4th Avenue, Suite 640
Anchorage, Alaska 99501-2133

Dear Senator Leman:

The Joint Legislative Committee on Electric Utility Restructuring has asked for input from Chugach and other utilities on appropriate topics for consideration in a possible study to be conducted by the Alaska Public Utilities Commission. We offer here our views and suggestions on the steps needed to move toward allowing customers to choose their electric power service providers.

I. **Focus the study on the immediate question of competition in Anchorage on a test case basis**

HCR-34 requires a recommendation to the 21st Legislature when it convenes in January. This will require that any study be very tightly focused only on the most important near-term question. Chugach recommends that the study focus on a single important question:

Are there compelling reasons the State of Alaska should prevent Anchorage customers from choosing their retail electric service provider on a test case basis beginning as soon as possible?

Chugach strongly urges the Joint Committee to recommend legislation to allow Customer Choice in Anchorage immediately. This can be permitted on a test basis, if necessary, and if later oversight or further study is conducted, the Anchorage test case should be an integral part of that effort. Pinpointing the focus of the near-term study on recommendations with respect to an immediate Anchorage test case will set the stage for later consideration by providing real experience for further study and oversight.

II. Study something real over the longer term

We all know that the Alaska situation is different from that in the contiguous lower 48 states. This does not license us to ignore lessons from lower 48 efforts. However, it does counsel us to gain experience with actual competition here in Alaska if we are to make real progress toward customer choice for Alaskans. For this reason, Chugach urges that the Joint Committee's course of action include strong policy guidance to the Public Utility Commission to immediately establish a customer choice test case in Anchorage without any regulatory reconsideration of this policy determination.

Without such a pilot, any study will yield sterile academic results with little assurance that its conclusions are reliable. While Chugach does not see special benefit in an abstract study, Chugach can support a pilot beginning immediately in Anchorage with oversight, study and reporting on that experience.

III. There is no need to wait

It is important to note that Chugach has proposed merely to sell to several customers across town and to pay for access over ML&P's existing system at a fair rate set by the Commission. That is all there is to it. We propose to pay for access according to established ratemaking principles and using cost data already being used as the basis of ML&P's charges to its own customers. We do not propose any significant change in physical plant. There is no need to solve every imaginable problem just to sell to a few customers across town on a test case basis.

If customer choice brings downward pressure on prices as it has for virtually every other restructuring industry, delay is costing Anchorage citizens a lot. If customers were to achieve overall savings of just 2%, this would result in savings of over \$3 million annually in the ML&P and Chugach service territories. This means that if 2% savings were to result from customer choice, every month of delay would cost ratepayers a quarter of a million dollars. And this says nothing of the stimulative effect of redirecting those dollars to other areas of the local economy.

Attached to this letter are answers to questions which have been raised by participants in this debate. These answers demonstrate that there are no compelling reasons for further delay which denies Anchorage customers the benefits of choice.

In an earlier submittal to the Committee, Chugach articulated its view of the key Legislative Building Blocks as follows:

- Clear legislative policy favoring retail competition in the electric industry.

•**Pilot Program for large densely populated distribution service territories.** This could involve, for example, requiring access to the transmission and distribution facilities of a certificated electric utility for the provision of retail electric service if the electric utility has annual electric power sales over 200 million kWh and more than thirty customers per mile of distribution lines.

•**Broad outline of stranded investment recovery guidelines.** These should include protections for the consumers against inclusion of costs not truly stranded as result of competition. Any utility being paid for stranded generation capacity should make the capacity available for use by those paying these costs.

•**Consumer protection.** This can include a provision establishing consumer protection bonding requirements for unregulated power marketers and a directive that the APUC ensure universal service. Any additional consumer protections can be provided under existing APUC authority.

Simple legislation based on these building blocks should be recommended to the legislature for passage during the first session of the next legislature. The pilot established by this legislation will provide invaluable information which can be considered as part of any study the legislature undertakes to study customer choice in Alaska. Indeed, Chugach urges that a customer choice program established by legislation be used to provide the Alaska experiential basis for any study of customer choice in Alaska.

IV. Hear expert advice on what and how to study the issues

Chugach is arranging to have Dr. Frank Wolak, Assistant Professor at Stanford University attend the Joint Legislative Committee's next meeting in Fairbanks on September 16. Dr. Wolak is the Chairman of the California Independent System Operator (ISO) Oversight Committee. The ISO Oversight Committee is in charge of overseeing the emerging market in California. Dr. Wolak is very knowledgeable about the progress of implementing competition in the lower 48 states and California in particular. Dr. Wolak is also familiar with the processes followed by Australia, New Zealand and Britain. Dr. Wolak's academic emphasis is on Industrial Organization, including the transition of non-competitive regulated businesses to competitive, less-regulated forms. Dr. Wolak's knowledge of the successes and mistakes of efforts in other parts of the world (including the lower 48 states) offers us the opportunity to benefit from advice and suggestions about how to begin allowing customers a choice of electric suppliers. We hope that the Joint Committee will hear what Dr. Wolak has to say and carefully consider his recommendations on how best to proceed.

Senator Loren Leman
August 27, 1998
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V. Conclusion

Chugach acknowledges that there are a few issues which must be addressed in progressing toward customer choice. The good news is that we do not lack for solutions. There are relatively simple solutions to any issues which have been raised. The problem is that the various stakeholders are having motivational problems. Motivation is what is needed and what the legislature can quickly and easily provide. Until the legislature sets a policy clearly favoring customer choice, studies, debates, confusion and colloquy will triumph over solutions. Simple and clear legislative policy guidance will prime the pump. Once the legislature sets a clear course toward customer choice, even if only to create a pilot and companion study, solutions to remaining issues will quickly develop.

Sincerely,

A handwritten signature in cursive script, reading "Eugene N. Bjornstad". The signature is written in dark ink and is positioned above the printed name and title.

Eugene N. Bjornstad
General Manager

Attachment

Customer Choice Questions and Answers

I. Competition issues

Shouldn't wholesale sales be made competitive first?

1. Wholesale sales have always been competitive so no further action to allow wholesale competition is needed. ML&P knows this perfectly well as they have actively competed with Chugach for better than a decade for sales to Fairbanks. ML&P has been especially vigorous lately:

- 1994 ML&P offers lower rates to MEA,
- 1994 ML&P offers economy energy to Fairbanks,
- 1995 ML&P attempts to contract with CVEA in a joint venture,
- 1996 ML&P attempts to get Seward as a customer,
- 1997 ML&P signs contract to sell energy to GVEA.

It is true that competition is sporadic because the market is small and because several contracts are long term. However, it is simply incorrect and misleading to insist that wholesale competition does not exist. The long term contracts can be altered only by the parties so the best way to bring about change in the wholesale market is through competitive pressure brought about by retail competition.

2. The key to stimulating greater wholesale competition is to allow retail competition. For example, Chugach has a long term power sale agreement with MEA. However, allowing MEA's retail customers to choose a supplier other than MEA (such as ML&P) will pressure both MEA and Chugach to make sure they are both delivering good value. This will stimulate greater competition at the wholesale level as well as the retail level.

3. The increased competitive pressure of retail choice will stimulate fuel supply competition. All three generating utilities (Chugach, ML&P and GVEA) purchase fossil fuel for generation (natural gas, coal and fuel oil). So long as each utility can rest assured that its retail customers have no choice of supplier, the competition for lowest cost fuel supplies is less intense. We can see the potential for competition benefits in the economy energy market for sales to the Fairbanks area. Fuel supplies for Chugach retail loads under long term supply contracts are one price but for some incremental sales to Fairbanks, Chugach was able to obtain lower cost fuel. Why? Because it is necessary for both Chugach and the gas producer to effectively compete with ML&P and its gas suppliers. Without the competitive pressure, these lower costs would not have been achieved. A simple clear policy statement by legislative policy makers in support of the immediate start of competition in Anchorage will unleash these powerful forces on behalf of consumers at both the retail and wholesale levels.

How do we make sure there is a "Level Playing Field?" Shouldn't Chugach be required to give up its contracts with its wholesale customers?

1. Chugach believes that as a matter of law, competition is already allowed at the retail level. Although the APUC disagrees with us, this point is nevertheless very important because, in our view, ML&P could be competing at retail for MEA's customers. There is no need to set aside any contracts in order to compete at retail. Chugach does not seek to reargue legal issues here but rather to make the point that in our view (with which the Commission disagrees) there already is a very level playing field on which anyone can play. It is Chugach's view that unless the APUC explicitly restricts competition, it is permitted anywhere already so the field is level.
2. Chugach won the competition for its wholesale contracts fair and square. ML&P was never prevented from making a long term contract with either MEA or HEA. Contracts with wholesale customers were arrived at in a competitive environment with a level playing field. No one made wholesale customers buy power from Chugach. Chugach's wholesale customers had the realistic option and the actual ability to build their own supply sources. The governing bodies, the APUC and REA approved the contracts.
3. ML&P frequently asserts that the AEG&T/MEA/Chugach contract should be set aside because MEA has no option for its power supply. On the contrary, the contract clearly allows MEA to change from all requirements status to net requirements or partial requirements. It would be more accurate and more conducive to productive discussion to say that stranded investment provisions in the contract make it expensive for MEA to convert to the different status. These provisions protect Chugach's potentially stranded investment which Chugach made based on MEA's long term agreement to pay for its share of the system costs. It would be completely irresponsible for Chugach to consent to setting them aside. However, Chugach has repeatedly advised its wholesale customers that it is willing to negotiate changes or early termination. There is no free lunch. The wholesale customers promised to pay costs on the system Chugach built to serve them and Chugach expects them to honor that promise.
4. Chugach has protected itself against stranded investment through its power sales contracts. Setting them aside would create a stranded investment, not to mention deny Chugach the benefit of its bargain. It would not do any good to legislatively void those contracts. For one thing, it would not withstand legal challenge. But more importantly, it would simply mean that Chugach would be entitled to stranded investment payments. It would solve nothing.
5. Chugach has repeatedly offered to discuss amending or buy out of these contracts. To date they have not taken us up on this. If our wholesale customers want competition in their service territories, it is not for us to force that on them. They can speak for themselves. If they want it, they can so indicate and we are willing to work with them toward a mutually beneficial transition - with or without contract changes.

Shouldn't we wait for the Black and Veatch Power Pooling study to be completed?

The Black and Veatch Power Pooling study is not designed to answer the question of whether competition will work better than a managed collective pool of resources. To the extent that the study results are trustworthy (and there are some serious flaws in the study) the study will show savings from operating the system more efficiently. The question is what method of managing resources will achieve the greatest efficiencies; competition or government directed collectivization. Black and Veatch will merely confirm that there may be benefits from operating the system more efficiently. It will not address whether it is better to encourage competition or collectivization. This is a policy choice to be made by the legislature.

If the ultimate goal is to lower consumer prices for electricity, is it true that deregulation and competition will be the method?

Certainly the experience in the airline, natural gas, telephone, trucking and other industries has demonstrated competition is the surest route to savings. It is perhaps the greatest (and most painful) lesson of our century that competition generally is the most efficient and wealth producing economic structure. One need only look to the old Soviet Union for evidence that the old collectivist, planned structures have failed. Most of the rest of the world is busy removing the heavily regulated structures which have failed to produce highest value for consumers.

What happens if Chugach drives ML&P out of business? Won't that leave Chugach as a full monopoly?

1. Chugach expects ML&P will be a very capable competitor at the retail level just as they have been at the wholesale level. ML&P thinks so too and recently stated: "The transition to competition holds an enormous challenge and opportunity for electric utilities. Like any new development change can be profitable if you're positioned to take advantage of it. ML&P is!" (1996 Annual Report - Published 1997)
2. Chugach will not be allowed to combine generation with ML&P for antitrust reasons.
3. Competition is not a game that can be won and the game declared over. If ML&P fails to provide the value customers demand, some other entity will take its place which is capable of serving customers at the level they demand. This new entity will take up competition where ML&P leaves off.

How do we solve the rural/urban problems?

Rural areas may not be large enough to sustain competition for central station power but they are now and will continue to be exposed to increasing competition from self-generation and cogeneration as those technologies become more efficient. Nothing has changed legally in this

regard although technological changes are resulting in greater competition. Development of competition in the Railbelt will not affect rural consumers. Rural competition will certainly present different issues for consideration. Certainly under existing statutes (A.S. 42.05.221(d)) utilities beset by harmful competition can apply to the Commission for protection.

Unquestionably, the main difference is that many utilities in Alaska are not connected to a grid. From the standpoint of the development of competition, this means that competition for isolated rural communities will come from self-generation and cogeneration as it always has. The Railbelt, on the other hand, looks much more like the lower 48 states. In the Railbelt, where several systems have developed to be quite well interconnected, competition already exists not only in the form of self-generation and cogeneration but also potentially from independent power producers. Competition has been occurring at the wholesale level for at least a decade. The last bastion of non-competition is at the retail level within traditional service territories. This will involve both central station providers and power marketers (load aggregators) which claim to be exempt from regulatory oversight and are already active.

Can the state control the level of "cherry picking or cream skimming" and accomplish increased competition at the same time without eliminating competition?

The best way to ensure that "cherry picking" does not harm the little guy is to make sure the small customer has a choice. Generally speaking, government has a hard time when it tries to directly control, direct or plan commerce. We believe it is best for government to implement a structure with good incentives built in and allow it to run without direct intervention. If all customers are given the ability to choose their suppliers, the pressures of the competitive market will provide strong incentives for the suppliers not to abuse one group of customers by pushing costs onto them.

Is it a problem that Aurora is planning to lose \$100,000 to \$150,000 during their proposed pilot period?

As a small player in the market, Aurora's losses are not a problem. In the unlikely event it uses predatory pricing, anti-trust laws are available as a remedy.

ENRON pulled out of California. Does this show that competition is failing there?

1. Competition for retail customers in California is lukewarm because of the elaborate mandated 10% discount and stranded investment recovery mechanism that the legislature set up. The result is that if a supplier is able to offer lower costs, the resulting sales price is boosted up to the cap so that it is no different than the incumbent utility price. It is great for the incumbent utility and benefits the residential customer in the short run but it clearly stunts competition for residential

customers. Competitors there are holding back and waiting for the legislated transition period to pass so they can compete.

2. Note the last observation in the Brookings Study executive summary: Legislators should resist the temptation to elaborately plan and structure competition. To the extent we want to learn from past experience, the simpler, the better.

II. Consumer protection issues

Won't "Cherry Picking" make rates go up for residential and small commercial customers?

1. This is unrealistic. The assumption underlying this argument is that a utility will always have customers who do not have a choice and onto which costs can be heaped at will. Take away that assumption and the argument fails. The key to preventing "cherry picking" is in ensuring that even the smallest customers have a choice of suppliers.

2. If we keep firmly in mind that even the smallest customers can choose a new supplier (by aggregating themselves in to a large block, if necessary) then the belief that competitors will heap left over costs onto them is unrealistic. It would not be rational for a utility faced with price competition to decide that because it is losing business to competitors it should raise prices to its remaining customers.

3. This argument demonstrates how we are prisoners of our patterns of thought. It has so long been the assumption that prices for electric power are cost driven that utilities facing competition still have difficulty thinking first of cost cutting and efficiency and last about price increases.

4. You should be suspicious of people who say that their marketing strategy will be to raise prices to combat price competition. That is simply not believable.

How do we make sure reliability won't suffer?

1. This is a red herring. The bottom line is that nothing will change which has any real potential to affect reliability. It is a measure of the desperation of opponents of competition that they raise this issue as if it were serious.

2. For the foreseeable future, the same generators run by the same people will produce the power.

3. For the foreseeable future, the same people will operate the transmission and distribution systems and will have every incentive they currently have to operate and maintain the system in good repair.

4. The competition between ML&P and Chugach for sales to Fairbanks has not affected reliability. The GVEA annual reports state the service is there 99.999% of the time.

Who will provide Universal Service?

We think the supplier of last resort obligation should reside with the Distribution Service Provider. We have said so. We have never heard anyone object to that. It is not a problem as far as we are aware.

Do consumers need protection and, if so, how shall they be protected?

1. The Commission's authority to protect consumers will not be altered by consumers being given the choice of suppliers. Customers will be able to choose to buy from regulated suppliers of last resort (presumably the distribution access providers) with all the consumer protections provided by Commission regulation or to buy from unregulated power marketers. Chugach does not believe that customers need to be prevented from choosing out of fear that they may choose poorly. Rather, assuring availability of a supplier of last resort strikes the right balance by giving customers the ability to choose suppliers while assuring that customers can always receive electric service from regulated suppliers under rules set by the Commission.

2. It is noteworthy that consumers safely purchase a number of "essentials of life" (e.g. home heating oil, motor fuels and even food) from sellers which are not subject to heavy consumer protection regulation. There is every reason to believe that a similar approach will work for electricity too. It would seem that so long as there is the safety net of suppliers of last resort that back up the system, there should be no problem; customers can choose whether they want more or less protection. Suppliers of last resort may wish to propose special rules or rates for taking back customers which have been dropped by unregulated power marketers.

Who will protect against inequities between customer classes?

There will be no change. Consumers will continue to have the same protections available that they now have. The Commission remains fully empowered to provide this protection and any additional protections may be appropriate. Furthermore, Chugach is prepared to commit to a residential base rate freeze for the three years of full retail competition beginning in 1999. That ought to be protection enough.

Won't the tax payers suffer if ML&P is driven out of business because of bond indebtedness?

No, not unless the municipal assembly steps in to bail them out, in which case it is a political choice. ML&P bonds are revenue bonds, not general obligation bonds. The bond holders are paid to take the risk of ML&P defaulting on the bonds. The risk correctly falls on bond holders.

How should the state assure that residential consumers reap the same benefits as large commercial customers?

Again, experience in the airline, natural gas, telephone, and other industries has demonstrated that where competition is allowed to operate for all levels of customers, even small customers benefit from greater choice and competition among service providers. It is a myth that cherry picking causes harm to smaller customers so long as all customers are free to choose. Any provider who tries to load costs onto small customers will find load aggregators forming them into "cherries" (larger aggregated loads) to be picked. Aggregated loads will find willing suppliers and reasonable prices just like other large loads.

How much will rates go down if customers get to choose?

1. It is reasonable to believe that prices will fall because they have in other industries: trucking, airlines, telephone, natural gas.
2. We cannot say exactly what savings price competition will produce. But, certainly this is no worse than under old cost of service rates because we could not predict exactly what rates would be either because they depended on costs.
3. We also cannot say who will benefit the most and in what amounts but if electricity is like other industries which have move toward competition, all levels of customers will benefit in the long run.

III. Protections for existing utilities

What shall we do about "Stranded Investment?"

1. There may or may not be stranded investments. We won't know until we examine it. Chugach might even have some.
2. Let the Commission sort it out. The Commission has indicated it does not need any additional authority. The legislature may choose to include a broad outline of stranded investment recovery guidelines in legislation establishing a pilot program. In either event, however, if a competitor has a problem, they can bring it to the PUC for resolution.
3. We are very lucky in Alaska. Not only is our system simple but we have:
 - No nuclear power plants
 - No huge over-built coal plants
 - No hyper-expensive regulatory mandated contracts
 - In Anchorage we have no regulatory mandated systems for subsidies

We simply do not have the problems of a state like California.

4. Chugach has carefully protected itself from some of its stranded investment exposure through contracts with its largest customers. We hear ML&P has been doing this as well. It is a smart move. Chugach entered into agreements in which we promised to make the investment in the system to meet their electric power needs. In return our wholesale customers promised to get specified amounts of power from us. They promised to be there and not strand our investments. Unless we negotiate a different contract (which we have repeatedly suggested we are willing to discuss) we expect them to live up to their promise just as we have lived up to ours.

IV. Other implementation issues

When electrical service areas overlap how do we preserve competition without duplication of capital investments?

A.S. 42.05.221(d) addresses this by empowering the Commission to restrict duplication of physical plant (lines running down both sides of the street) when it finds that it is not in the public interest. 3 AAC 52.110 et. seq. contains regulations providing procedures for quickly resolving disputes over allocation of facilities and services between competing electric utilities. The boundary settlement agreement between Chugach and ML&P divides service territories to prevent duplication of distribution plant. A.S. 42.05.311 requires utilities to provide access over existing facilities. The statutes are in fairly good shape. The only real need is for a broad policy statement embracing competition.

The APUC may not be able to handle the work load of restructuring.

This depends on how complicated the policy makers allow it to become. If the legislature sets policy and leaves implementation to the APUC, there should be no problem. The APUC may be overwhelmed if it is asked to make policy judgments about whether customer choice is wise public policy. If, on the other hand, the APUC need only set an access charge over the Chugach and ML&P systems that will not overwhelm regulators. Setting access charges involves only traditional ratemaking which must be considered within the core expertise of regulators.

Are there problems with metering?

Not significant ones. We have proposed that at least initially, the utility currently doing the metering continue to have the obligation to continue to do it. This would involve no change to the status quo. If, however, the customer wanted someone else to do it, they should have that option.

SCOMM

109:5

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September 1998 Issue of THE CHUGACH OUTLET
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October 1998 Chugach Restructuring Questions & Answers
October 1998 Chugach At A Glance
September 14, 1998 Wall Street Journal article, "The Federal Solution"
February 1998, Chugach Electric, "Attitudes Towards Competition in the Electric Industry"
November 1998 Listing of Items in Committee Packet and Those Items
October 22, 1998 Letter from Chugach Electric Association
November 17, 1998 "Materials Not in Packet"
November 18, 1998 Items Submitted by T. Staudenmaier
Black & Veatch, "Alaska Railbelt: Centrally Dispatched Power Pool or Continue As Is"
October 30, 1998, draft "Request for Proposal, Study of Electric Utility Industry Restructuring in Alaska"
November 16, 1998 Request for Proposal from APUC Web Site



Chugach...
your energy company

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News notes

• **You could win a trip to Hawaii** by signing up for Chugach's QuickPay program. With QuickPay you can pay your bill automatically from your checking account or choose the annual prepayment option and save \$25. By signing up, your name will be entered into a drawing for tickets to Hawaii. Entries will be accepted until Oct. 10, 1998. For more information, call Chugach at 563-7366, check out the statement insert or go to Chugach's homepage at www.chugachelectric.com.

• **As the nights are getting longer** many children will depend on the streetlights as they walk to and from school, or wait on the roadside to catch a bus. If you notice a streetlight that's not working, call Chugach at 762-7658.

see **News notes** page 3

THE CHUGACH OUTLET

September
1998
Number 173

Chugach works the Y2K issue

Like other businesses, Chugach has been actively working on what's called "the year 2000" problem. The issue is commonly abbreviated as "Y2K". The goal is to avoid outages or other system problems that might be caused by computer hardware and software programmed with 2-digit year dates when we get to Jan. 1, 2000. There is international concern that there could be major disruptions to a myriad of systems and services if computer programs and equipment fails to function properly.

Chugach has been working for some time now to ensure it is ready for the date change.

It has broken the project down into the three broad areas of energy supply, energy transfer and business systems. Each area has

people dedicated to finding and fixing problems in parallel efforts.

Energy supply

The energy supply area looks at each of the individual turbine-generators on the system and the controls that start, stop and regulate them. {194039 Ve} Some machine controls are so old, they predate the problem. Some control units have been upgraded in the recent past with systems certified as Y2K compliant. A few are still being investigated. Chugach plans to test its generation units for compliance, probably before the end of the year.

Computerized controls for the natural gas that powers Chugach's plants are also being evaluated.

see **Y2K** page 2

Safety Bear Buddy

Chugach is one of several utilities participating in a statewide Safety Bear Buddy program. The program lets kids in trouble know they can approach specially-marked, radio-equipped utility vehicles and ask for help. Utility employees will radio for assistance and stand by until the proper authorities arrive.

The Safety Bear Buddy program started in 1989. Participating companies use specially-marked vehicles with trained employees which are on the streets every day to help out kids, and sometimes adults. In fact, a Chugach employee recently helped a child who had fallen from a bicycle.

Children in trouble should think of safety first when looking for help. {186077 Do} Stress these safety tips to your child:

Never dart across the street without looking for oncoming traffic. Obey traffic safety rules. Stop. Look left, right, left and make sure it's clear before crossing the street.

Do not touch the utility truck. It may be attached to a high voltage line. Call the driver and wave your arms over your head to get their attention before approaching.

Always use common sense. It pays to be careful, especially during times of emergency.



Committee begins investigation

A legislative committee considering retail competition for electric customers has begun its work. The joint committee (comprised of four senators and four representatives) held a pair of meetings in Anchorage in August.

At the first meeting, legislators heard from invited utility representatives. As expected, only Chugach and Aurora Energy (a company interested in marketing electric service) spoke in favor of opening the Anchorage-area to customer choice at this time. Many others argued in favor of continued study - while professing to be in favor of competition as a general concept.

The second meeting of the committee was a public hearing where customers were encouraged to speak their minds. Several

commercial customers currently served by either Chugach or Anchorage Municipal Light & Power said they were in favor of customer choice because they felt it would lower their electric costs. {38980 Ar} The few speakers who identified themselves as residential customers raised questions about savings and reliability.

The committee scheduled a second public hearing for Fairbanks in September.

In related activity, Aurora Energy filed a proposal for a pilot project with the Alaska Public Utilities Commission. As proposed, it would make about 10 percent of the Anchorage load available for competition for a limited time. While we have some problems with the pilot as proposed, we do see the idea as a

step in the right direction.

The legislative committee is to report its findings to the full Legislature at the beginning of the next session. It is not yet clear what that report might recommend. Several ideas have been discussed. They include a variety of options which include: an expert study of the possible effects of retail competition, pilot programs to gain real-world Alaska experience, and full retail customer choice in Anchorage and beyond.

We'll continue to work with the committee as it proceeds with its review. I'll let you know about future developments.

Ernest M. Bjornstad

Y2K continued from page 1

Energy transfer

The energy transfer area deals with the flow of power from power plants to neighborhood substations. The primary focus here is on individual components within substations and the overall computerized system that Chugach uses to monitor and control the grid. {1117591 BI} This system is known as SCADA - which stands for system control and data acquisition.

To help identify and solve problems associated with individual pieces of equipment, Chugach has joined a database project for information sharing. Chugach is one of more than 130 utilities participating in the project to track compliance issues with individual system

components like those commonly found in substations. Chugach can use the database to see what problems other utilities may have found with a certain piece of equipment, as well as contributing its own experiences to the collective body of knowledge.

Chugach is buying a new SCADA system, which will be both certified and tested to be Y2K compliant. Chugach's existing SCADA system has been in place for a number of years and was due to be replaced shortly anyway. Replacing it with a new system that will be Y2K compliant was an added benefit.

Business systems

The business systems area covers software associated with accounting, payroll, purchasing,

human resources and other functions. For the most part, Chugach is replacing old software with new programs that are Y2K compliant. However each of these new programs must then be customized to meet the needs of the organization.

Good progress

To save time, all three areas are being worked on at the same time. Chugach expects to be substantially completed with each by the end of the year, and completely compliant by mid-1999. It is a multi-million dollar effort to ensure that power stays on when the clock strikes midnight on Dec. 31, 1999.

The Alaska Public Utilities Commission has also opened a docket to track the Y2K compliance efforts of electric and non-electric utilities.

Board report, continued from page 4

In other action at the July and August meetings, the board:

- Authorized the general manager to execute a \$624,129.83 utility agreement with the Municipality of Anchorage for the Lake Otis Parkway and Tudor Road relocation project.
- Authorized the general manager to execute a \$433,814.32 work authorization with City Electric to complete installation of a 300-megavolt-amperes transformer at Chugach's University Substation.
- Authorized the general manager to execute a \$1,077,175 equipment and field service contract with American Hydro Corp. to start engineering and manufacturing new turbine components for the Cooper Lake Power Plant upgrade and system improvements.
- Approved capital credit payments totaling \$36,179.24 to 80 estates, bringing the 1998 estate payments total to \$122,351.46.
- Approved an amended Board Policy 203, Compensation of Directors, so that it conforms to Chugach's bylaws.
- Approved Board Policy 209 and 210, Appointment of Standing Committee Members and Vacancies in Unexpired Terms, respectively. While there were no changes to the policies, they must be reviewed by the board every five years.
- Deleted Board Policy 301, Energy Efficiency.
- Approved director absences.
- Approved directors' expenses.

Board viewpoint

by Pat Jasper, President



A question for candidates

Another election season is here. All seats in the Alaska House of Representatives and half of those in the State Senate are up for election this fall. While they're not the only races to consider, they may be very important races for those of us who feel individual customers should be able to pick their electric company.

It's appearing more and more likely that the Legislature will decide the issue of whether — and how — customer choice will become a reality in the Alaska electric industry. Last session the Legislature appointed a joint committee to investigate this issue. The committee's work will be finished by the time the Legislature convenes in January. While it's still early in the process, one outcome may be a bill that addresses the issue. That means that any proposed legislation will be voted on by the people we elect this fall.

I realize that most of us probably will not make a decision to elect a legislator based on this single issue. However, I will suggest that as the campaigns progress, there will be opportunities to ask candidates how

they feel about different issues. When the opportunity comes, I'd like you to consider asking how candidates feel about customer choice for electric power.

That could prove helpful in several ways. I suspect that many candidates have never really thought about it as an issue. If they are asked to vote on a bill next session, it would be well if they began considering the issue now. Asking about electrical power choice will also show that customer choice is an issue that's on the mind of voters in their districts. {190046 Le} That will help us when we have later discussions with our senators and representatives. I know from personal experience that legislators are more interested in topics they know are of concern to their constituents.

Even if you choose not to raise customer choice as an issue with candidates, I hope you'll join me in voting in the upcoming election.

Are you a voice for choice?

You can do your part to support Chugach in its efforts to allow you to choose your electric utility. Write or e-mail the Alaska State Legislature's Joint Committee on Electric Utility Restructuring. You can write Rep. Norman Rokeburg at 716 W. 4th Ave., Suite 200, Anchorage, AK 99501 or e-mail him at: Representative.Norman_Rokeburg@legis.state.ak.us

News notes, continued from page 1

• **Winter is coming and the ground** will soon be freezing. Chugach will be unable to bury new underground service lines. When that happens, Chugach will install the line in a flexible black conduit called "Corflo" on top of the ground. Corflo services will be scheduled for burial during the 1999 construction season. For more information, call 762-7679.

• **Your member number is worth \$50** if you spot it in the Outlet. Each month three member numbers are inserted into the copy. These numbers are in brackets like this {} along with the first two letters of the member's name. If you find a number like this that matches the member number printed on your bill, call our service center at 563-7366 to claim your prize. You may win for the current or previous month's issue.

Board approves write offs

The board at its July meeting approved writing off \$148,330.66 in uncollectible electric accounts for the six-month period ending April 30, 1998. By comparison, Chugach wrote off \$152,349.19 for the six-month period ending Oct. 31, 1997. {198978 No} While uncollectibles are written off, Chugach continues to aggressively pursue repayment of the debts.

The board also approved writing off \$6,680.41 in uncollectible miscellaneous electric accounts for the six-month period ending April 30, 1998. By comparison, Chugach wrote off \$31,293.21 for the six-month period ending Oct. 31, 1997. Chugach also pursues repayment of these debts even after they've been written off.

Chugach sold 162.8 million kilowatt-hours of electric service in June, about 3.3 million kwh less than projected by the budget. Wholesale power sales accounted for 70.1 million kwh, retail sales for 87.4 million kwh and economy energy sales for about 4.5 million kwh. Year-to-date sales stood at 1 billion kwh, about 43 million kwh less than projected by the budget.

Chugach finished June with operating revenues of \$11.3 million, about \$81,000 more than anticipated by the budget. Year-to-date operating revenues stood at \$72.6 million, about \$3.3 million less than projected by the budget.

June expenses were \$10.7 million, about \$833,000 less than projected by the budget. Year-to-

date expenses stood at \$66.1 million, about \$3.6 million less than projected by the budget.

At June's end, Chugach's equity-to-total-capitalization ratio was 27.37 percent.

By comparison, Chugach's year-to-date June 1997 power sales totaled 1.1 billion kwh, while operating revenues were \$69.6 million and expenses were \$66.4 million. Chugach's equity-to-total-capitalization ratio at the end of June 1997 was 27.22 percent.

see **Board report** page 3

Residential Service Costs	
Customer charge	\$6.25/month
Kilowatt-hour charges:	
Energy charge	7.727¢
Fuel adjustment	1.703¢
State tax (RCC)	0.028¢
Total per kwh	9.458¢



The Chugach Outlet

A Publication of Chugach Electric Association, Inc.
5601 Minnesota Drive
P.O. Box 196300, Anchorage, Alaska 99519-6300



How to reach us

Our service center at 5601 Minnesota Drive is open from 8 a.m. - 6 p.m., Monday-Friday. Switchboard hours are 8 a.m. - 5 p.m.

Frequently called numbers

Main number 563-7494
Toll free (800) 478-7494
Customer service 563-7366
Customer service fax 762-4678
Credit 563-5060
Power theft hotline 762-4731
Danger tree hotline 762-7227
On-line <http://www.chugachelectric.com>

To report a power outage

In Anchorage 762-7888
Outside Anchorage (800) 478-7494

Payment options

You may pay your bill by mail, automatic debit from your checking account, in-person at our service center or by using our curbside drop box. You may be able to pay by phone if your bank or credit union offers this service. Current payments may also be made at any Anchorage branch of the First National Bank of Anchorage.

Chugach Electric Association, Inc. is a not-for-profit member-owned electric cooperative and Alaska's largest electricity supplier. Chugach's mission is to meet the energy needs of members and customers by providing competitively-priced, reliable, safe energy and services today and into the future through prudent and responsible planning, maintenance and management of the assets of the cooperative.

Patricia Jasper, President (907) 243-5678
Jewel Lake

Chris Birch, Vice President (907) 346-3265
Valli Vue cjbirch@alaska.net

Bruce Davison, Secretary (907) 563-6555
Sand Lake davison@alaska.net

Mary Minder, Treasurer (907) 248-1250
Sand Lake

Ed Granger, Director (907) 345-6462
Oceanview 72062.2054@compuserve.com

Pat Kennedy, Director (907) 333-1217
Satellite Park pkennedy@customcpu.com

Ray Kreig, Director (907) 276-2025
Turnagain ray@kreig.corh

Gene Bjornstad, General Manager

CHUGACH
ELECTRIC
ASSOCIATION

ANNUAL
REPORT

1997

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CORPORATE MISSION

Chugach's mission is to maximize the value its customers receive by safely providing competitively priced, reliable energy and services through innovation, leadership and prudent management.

CORPORATE VISION

Be the customer-preferred provider of reliable utility services in regulated and competitive Alaskan markets.

INCORPORATION

Chugach Electric Association was incorporated in Alaska, March 1, 1948, with funding under the Rural Electrification Act of 1936, as amended. In 1991 Chugach refinanced and paid off its federal debt, leaving the REA program. Chugach remains a cooperative, and ranks among the largest of the nearly 1,000 electric cooperatives in the nation.

PERSONNEL POLICY

It is a policy of Chugach Electric Association, Inc. to provide employment, training, compensation, promotion, and other conditions of employment without regard to race, color, religion, national origin, sex, disability, veteran's status, age or any other classification prohibited by law. Chugach is also an affirmative action employer.



ON THE COVER

Chugach Electric Association is headquartered in Anchorage, Alaska's largest city. Chugach provides power to approximately two-thirds of the homes and businesses in the municipality. Anchorage sits at the base of the Chugach Mountains. The word "Chugach" comes from an Eskimo tribal name, which the Russians recorded as "Chugatz" or "Tchougatskoi." In 1898, U.S. Army Capt. W.R. Abercrombie spelled the name "Chugatch" and applied it to the mountains.

Customer choice was the theme for Chugach throughout 1997. The utility took a number of actions to promote the idea that customers deserve the right to choose their electric power provider. At the same time, Chugach was working to ensure it would be the reliable, affordable, preferred choice of both current and future customers. Among other actions:

In February, the Chugach board of directors passed a resolution declaring there would be no increase to base rates in 1997.

In April, Chugach supported legislation in Juneau that would have promoted competition in the Anchorage area for retail electric customers. It was a vastly different bill than one supported by most other utilities that would have raised walls around utility service territories.

The 1997 annual meeting was held April 30. Directors Chris Birch and Ray Kreig were returned to the board, and four proposed bylaw changes were approved by the 19.2 percent of the membership that voted in the election. A total of 196 members registered for the annual meeting.

The long process to build a new transmission line between Anchorage and the mid-Kenai Peninsula took another step forward when the route selection study was completed in June. Work then began on the draft environmental impact statement, expected to be completed in 1998.

Chugach launched several new programs in 1997. Two debuted in summer. "Construction performance guarantees" told customers and builders that Chugach would have their power connected by an agreed-upon date, or pay them for the inconvenience of delays. "Flexible due dates" let customers choose the day of the month their bills would be due.



A study identified routes for a Southern Intertie between Anchorage and the Kenai Peninsula to augment Chugach's existing 115-kilovolt transmission line.



Chugach completed strategic alliances in January to cut the cost of warehouse inventory.

A new strategic plan for the organization was adopted in September. Its priority issues are cost, organizational performance, regulatory barriers, corporate business direction and wholesale customer relations.

In September a pair of commercial customers served by Anchorage Municipal Light & Power formally asked Chugach to provide their power. The two separate cases provided an opportunity for Chugach to propose access charges to make it possible for the two utilities to move power over each others lines in response to customer demands for retail choice. The issue wound up in a docket before the Alaska Public Utilities Commission, and remained unresolved at year's end.

In October, Chugach, Matanuska Electric Association and Anchorage Municipal Light & Power completed the purchase of the Eklutna hydroelectric project from the federal government. It brought to a close a long process that officially began with the signing of a purchase agreement in 1989.

As the year closed, Chugach and Local 1547 of the International Brotherhood of Electrical Workers were negotiating new labor agreements to replace those due to expire Jan. 31, 1998. Approximately two-thirds of the Chugach work force is represented by the IBEW.



Gene Bjornstad, General Manager

Championing customer choice

Throughout 1997, Chugach continued to champion the idea that customers deserve the right to choose the company to supply their electric power. We fought this battle on many fronts.

Chugach opposed legislation pushed by many other Alaska electric providers that would have created walls around service territories. Instead, we supported an alternate bill that would have hastened customer choice in the Anchorage market. Neither bill moved out of committee, and we know there is more work to be done in Juneau.

Our reading of the law is that competition is already allowed under federal antitrust law. It can only be prevented when the legislature sets an explicit policy to replace competition with regulation, or when regulators have determined it to be occurring and to not be in the public interest. Since neither of those events has happened, we continue to press the issue on behalf of customers.

Customers in Anchorage overwhelmingly support customer choice. More than 90 percent of Anchorage registered voters surveyed think customers should have the right to choose the company from which they buy their electric power. Given the history of benefits to customers from the introduction of competition in other former monopolistic industries, this result is not surprising. With this level of public support we expect that the political support for the electric utilities opposed to competition will dwindle.

To better position Chugach for the competition we feel is inevitable in our industry, we reorganized the company to follow the three basic functions of producing, moving and retailing electric power. We created an internal "genco" (generation company), "wireco" (wires company) and "retailco" (retail services company). Each of these functions is headed by an executive manager responsible for key goals in their individual areas of responsibility. Each also provides shared services and cooperation necessary to the smooth operation of the overall organization.

While these divisions are largely invisible to customers, they have helped us focus on the core competencies of our business. The very ones which will be challenged by other organizations when customer choice becomes a reality in our marketplace. That day is coming, and when it does I think the organizational changes we made in 1997 will help us thrive.

In the meantime, they have helped us provide better services to customers. And that, after all, is why we're here.

Gene M. Bjornstad

Gene Bjornstad
General Manager

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Patricia Jasper, President

Setting a competitive course

It is the function of the board of directors to set policy for the organization. As a board, we have made it clear that we want to bring the benefits of competition to Chugach members. We are pursuing this effort on several levels simultaneously.

Perhaps most visible has been our effort to open the Anchorage-area power market to retail competition. We firmly believe that empowering customers to choose the company that supplies their electric power will lead to lower prices and better services. That's been the case in other industries that have been deregulated, and I believe it will be the same for our industry.

Some are surprised that a regulated monopoly like Chugach would voluntarily push for competition. First and foremost, as directors our purpose is to make decisions that serve the interests of the membership. It is our belief that retail electric competition will be good for customers. Consequently, it is our duty to push for change in our industry.

Secondly, we think Chugach has a good chance to not only survive, but thrive, in the coming competitive marketplace. We have been hard at work for the past few years to refocus the organization on meeting the needs of its customers and trim costs while maintaining reliability and safety.

In addition to our public push for customer choice, we have been advocates of competition in other areas of our business.

The board has taken steps to ensure our own bid process is open to all qualified, responsible and capable bidders. As a result, we have seen savings on goods and projects throughout the past year. This, again, demonstrates the benefit of competition to our consumers.

In recent years, Chugach has also participated in a number of benchmarking projects. This has allowed us to "compete" against other utilities across the country and around the world. We have learned much from these studies – including how to copy the practices of the "best performers." The end result has been improved efficiencies and reduced costs in many functions.

Competition is not always an easy path, but as a board we believe it is the best way to improve service to the membership we represent.

A stylized, handwritten signature in dark ink that reads "Patricia B. Jasper".

Patricia Jasper
President

Patricia Jasper, President

Patricia Jasper is a small-business owner and a former computer programmer and systems analyst. She was first elected to the board in 1995 and re-elected to a 3-year term in 1996.

Ed Granger, Vice President

Ed Granger is a professional engineer. He served on the board from 1991 to 1994, then was appointed to the board in 1995 to fill a vacancy and elected to the board in 1996.



Chris Birch, Secretary

Chris Birch is a senior project manager and licensed engineer. He was appointed to the board in November 1996 to fill a vacancy and elected to the board in 1997.

Mary Minder, Treasurer

Mary Minder is a realtor and associate broker. She was elected to the board in 1995.



Bruce Davison, Director

Bruce Davison is an attorney and professional engineer. He was appointed to the board in June to fill a vacancy left by director Kathleen Weeks.

Pat Kennedy, Director

Pat Kennedy is an attorney limiting her practice to guardian ad litem and child custody investigations. She has served on the board since 1993 and was re-elected in 1996.



Ray Kreig, Director

Ray Kreig is a professional civil engineer and geologist, and is president of R.A. Kreig & Associates. He has served on the board since 1994 and was re-elected in 1997.



Mary Minder, Treasurer

1997 was another year of sound financial performance for Chugach. We met all our required financial targets for the year and we did it without raising base rates for demand and energy.

In February, the board pledged to not raise base rate demand or energy charges during 1997. Later in the year, we also chose to not increase the fuel surcharge – despite rising fuel and purchased power costs. While this decision led to reduced margins, it helped us maintain stable, attractive rates for another year as we prepared for the retail competition we feel sure will come to the Anchorage area.

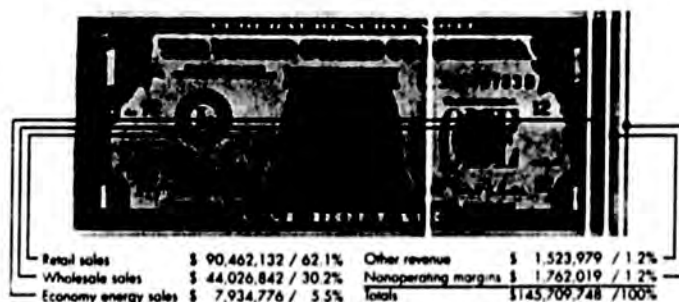
However, we could not ignore the impact of higher natural gas costs. During 1997, our goal was to hold base rates at their existing levels, while mitigating what will hopefully be a short-term hike in gas prices. We chose to use a balanced strategy of writing off a portion of the increased costs in 1997, while spreading the remaining portion over a longer period of time for collection in the fuel surcharge in 1998.

One of Chugach's solid bond ratings was reaffirmed in 1997. Chugach once again earned an "A+" from Fitch Investors Service, as well as a better-than-average score on the company's competitiveness test.

Here is a summary of Chugach's 1997 financial performance.

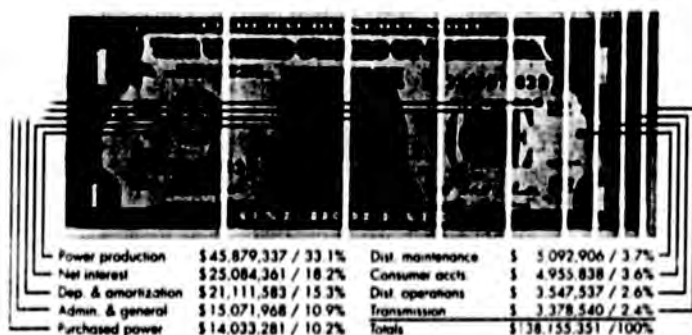
OVERVIEW

Chugach finished 1997 with total revenues of \$145.7 million, operating revenues of \$143.9 million, expenses of \$138.1 million and margins of \$7.5 million.



Revenues and other margins: \$145,709,748

Chugach earned total revenues of \$145.7 million in 1997, up 7.1 percent from 1996. Power sales accounted for \$142,423,750 of the total. Retail sales accounted for 63.5 percent of sales revenue, wholesale 30.9 percent and economy energy 5.6 percent.



Expenses: \$138,155,351

Chugach had expenses of \$138.1 million in 1997, up 9.4 percent from 1996. Most of the increase came from rising fuel expenses. Operating and maintenance expenses accounted for 65.7 percent of the total, while fixed expenses made up the remaining 34.3 percent. At \$45.9 million, the cost of producing power was the largest single expense for the utility in 1997 – and up 23.8 percent from a year earlier due largely to increased fuel costs.

KEY RATIOS

Chugach achieved a margins-for-interest-to-interest ratio of 1.2938 in 1997, above the 1.20 required by its indenture of trust. The equity-to-total-capitalization ratio (the accumulated ownership of the members in the capitalized plant of the utility) rose to 25.94 percent by year's end.

POWER SALES

Chugach sold 2.27 billion kilowatt-hours of electric service in 1997, a 2.4 percent increase from 1996. Sales were up in all three major categories from the year before. Retail sales rose 1.3 percent, while wholesale sales were up 0.4 percent and economy energy sales climbed 15 percent.

REVENUES

Chugach earned \$145.7 million in total revenue in 1997, up 7.1 percent from 1996. Operating revenues of \$143.9 million were up 6.7 percent from the year before. Sales revenues were up in all major categories. Retail sales revenues rose 4.8 percent from the year before. Wholesale revenues were up 7.3 percent. Economy energy revenues climbed 32.1 percent from 1996.

EXPENSES

Expenses totaled \$138.1 million in 1997, up 9.4 percent from 1996. Higher fuel costs contributed significantly to the increase.

MARGINS

Chugach earned \$7.5 million in margins in 1997. Although margins were down 23.2 percent from a year earlier, they were more than sufficient to meet or exceed all of Chugach's financial targets.

RETAIL RATES

Retail base demand and energy rates remained unchanged throughout the year. Rates have been extremely stable in recent years. Prior to 1997, Chugach last adjusted retail base rates in May 1995 – and that action was to lower rates. The last time base rates were lower than their 1997 level was in March 1993.

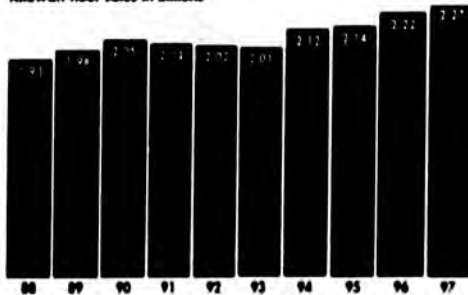
Power sales: 2,269,453,064 kilowatt-hours

Chugach sold 2.27 billion kilowatt-hours of electric service in 1997, up 2.4 percent from 1996. Retail sales accounted for 45.2 percent of all kwh sold. Wholesale followed at 42.4 percent and economy energy at 12.4 percent. The system peak load for the year was 397 megawatts. It was reached between 6 and 7 p.m. on Jan. 7, when the temperature at Chugach headquarters was 21 degrees below zero Fahrenheit. The 1997 peak broke the former all-time record peak of 385 megawatts that had stood since January 1989.

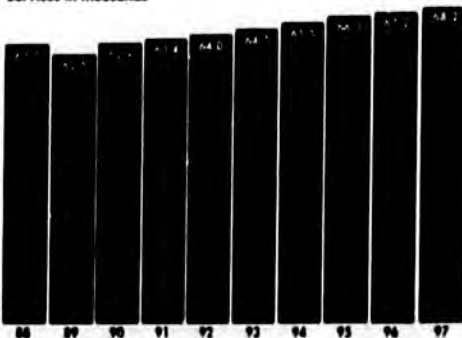
Services in place: 68,183

Chugach had 68,183 services in place at the end of 1997, up 1.5 percent from December 1996. A total of 1,223 new services were connected during the year, and 216 retired – for a net gain of 1,007. The number of idle services fell by 30.4 percent, from 1,837 at the end of 1996 to 1,279 at the end of 1997. Chugach's retail customer base is twice as large as any other electric utility in Alaska, and includes approximately two-thirds of the households in Anchorage.

Kilowatt-hour sales in billions



Services in thousands



WHOLESALE RATES

Likewise, wholesale base rates for demand and energy were also held constant throughout 1997. However, through a settlement agreement in a rate case with the wholesale customers, Chugach expects that their rates for 1997 will be reduced and has made provision for a refund. Final resolution of this issue awaits a decision by the Alaska Public Utilities Commission.

FUEL ADJUSTMENT

In January and again in April, the fuel surcharges for both retail and wholesale customers were raised to reflect increases in the cost of fuel and purchased power. These increases were driven by a number of factors, including increases in the three indexes used to adjust the price Chugach pays its suppliers for the natural gas to fuel its power plants. The hikes in the indexes were driven by a combination of unusual events – including a shortage of heating fuel on the East Coast and concurrent higher prices, along with a rise in the prices of consumer natural gas and crude oil. The indexes are expected to decline in 1998. Chugach was unable to get as much energy as anticipated from the Bradley Lake hydroelectric project due to lower reservoir levels early in the year. The reservoir was also drawn down and no power produced for a period between May and July to allow repair of a fish water bypass. While Chugach intentionally held off raising the fuel surcharge later in 1997 in anticipation of coming competition, it did file for fuel surcharge increases to go into effect in January 1998 for both wholesale and retail customers.

RESIDENTIAL SERVICE COST

The cumulative effect of increases to the fuel surcharge in January and April caused a moderate increase in the cost of residential electric service in 1997. In December, Chugach was charging residential customers a monthly service charge of \$6.25 and 8.9637 cents per kilowatt-hour (including energy, fuel adjustment and the state tax known as the regulatory cost charge). The cost for 750 kwh of residential service in December 1997 was \$73.48, up 4.8 percent from a year earlier.

BONDS

In 1997, Chugach continued to reduce the cost of its long-term debt by taking advantage of lower interest rates. The cooperative reacquired another \$5 million of its long-term bonds, originally issued as 30-year instruments in 1991 at an interest rate of 9.14 percent. This action saved approximately \$100,000 in interest costs in 1997 alone. The reacquisition was initially financed using a line of credit from CoBank. A \$15 million bond was subsequently issued to CoBank to cover the cost of the acquisition and capital construction. This bond matures in three \$5 million increments in 2002, 2007 and 2012 – and carries a variable interest rate that was 6.65 percent at time of issue. From its 1991 refinancing, Chugach had \$217.7 million in publicly traded 30-year bonds, and \$28.8 million in 10-year bonds outstanding at Dec. 31, 1997. In addition, it had a cumulative total of \$71.3 million in outstanding bonds issued to CoBank.

CAPITAL CREDITS

Chugach allocated \$9.8 million in 1996 margins in October. Of the total, \$8.2 million was credited to retail members of record. The balance was allocated to wholesale customers Matanuska Electric Association, Homer Electric Association and the City of Seward. In November, the board approved retiring the \$1.9 million in retail capital credits remaining on the books from 1983. At the same time, the board authorized returning \$1.2 million in 1987 credits to wholesale customers MEA, HEA and Seward. Chugach also made \$250,346 in capital credit payments to 499 estates in 1997.

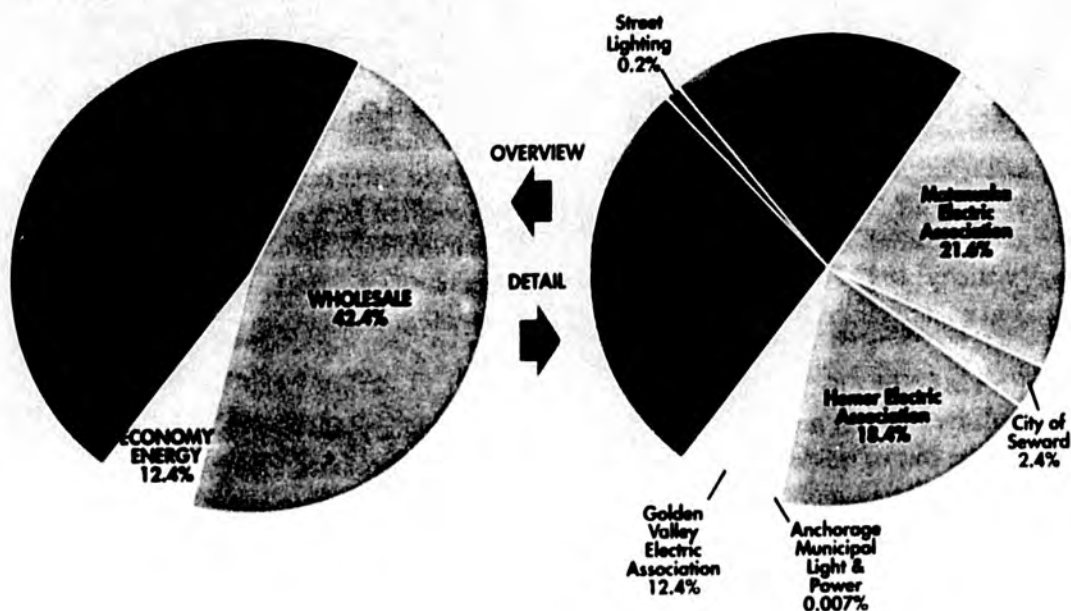
In summary, Chugach maintained stable base rates while meeting all its financial goals for the year.

Mary Minder

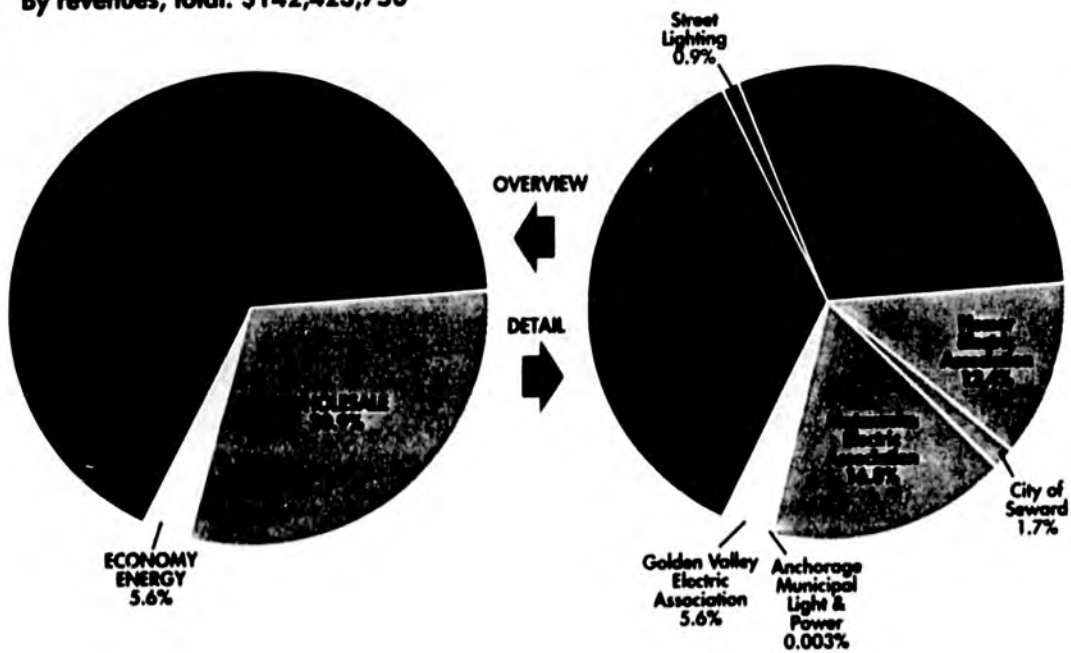
Mary Minder
Treasurer

POWER SALES AT A GLANCE

By kilowatt-hours, total: 2,269,453,064



By revenues, total: \$142,423,750



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December 31, 1997 and 1996

ASSETS	1997	1996
Utility plant:		
Electric plant in service	\$625,365,803	\$ 615,464,060
Construction work in progress	24,664,395	19,826,957
	650,030,198	635,291,017
Less accumulated depreciation	232,136,950	215,411,223
Net utility plant	417,893,248	419,879,794
Other property and investments, at cost:		
Nonutility property	3,550	3,550
Investments in associated organizations	7,864,271	7,647,189
Restricted cash-margins from Economy		
Energy sales, all purchase agreements	-	1,599,239
	7,867,821	9,249,978
Current assets:		
Cash and cash equivalents, including		
repurchase agreements of \$6,351,291 in 1997		
and \$6,216,073 in 1996	5,224,529	5,419,819
Cash-restricted construction funds	364,778	1,371,386
Special deposits	151,703	89,232
Accounts receivable, less provision for		
doubtful accounts of \$367,029 in 1997		
and \$367,085 in 1996	23,999,138	15,369,883
Materials and supplies, at average cost	15,619,085	16,187,592
Prepayments	558,371	694,257
Other current assets	305,415	294,380
Total current assets	46,223,019	39,426,549
Deferred charges	13,583,211	13,932,109
	\$485,567,299	\$ 482,488,430

LIABILITIES

	1997	1996
Equities and margins:		
Memberships	\$ 861,543	\$ 812,748
Patronage capital	104,800,092	100,685,517
Other	3,458,062	2,979,677
	109,119,697	104,477,942
Long-term obligations, excluding current installments:		
First mortgage bonds payable	240,910,000	251,553,000
National Bank for Cooperatives bonds payable	71,096,501	56,352,847
	312,006,501	307,905,847
Current liabilities:		
Notes payable	-	2,750,000
Current installments of		
long-term debt and capital leases	5,913,512	5,971,752
Accounts payable	7,038,234	5,178,161
Consumer deposits	1,038,241	1,066,906
Accrued interest	6,904,335	7,076,388
Salaries, wages and benefits	3,655,101	3,583,422
Fuel	6,611,415	6,047,574
Other	3,300,310	5,012,191
Total current liabilities	34,461,148	36,686,394
Deferred credits	29,979,953	33,418,247
	\$485,567,299	\$ 482,488,430

STATEMENTS OF REVENUES, EXPENSES & PATRONAGE CAPITAL

Years ended December 31, 1997, 1996 and 1995

	1997	1996	1995
OPERATING REVENUES	\$143,947,730	\$134,876,668	\$129,379,308
OPERATING EXPENSES:			
Production	45,879,337	37,066,444	31,533,567
Purchased power	14,033,282	10,024,483	10,136,623
Transmission	3,378,540	3,667,039	3,460,823
Distribution	8,640,443	8,789,683	10,008,020
Consumer accounts	4,955,838	6,978,856	7,089,847
Administrative, general and other	15,071,966	13,713,690	14,395,125
Depreciation	21,111,584	20,673,609	19,296,356
Total operating expenses	113,070,990	100,913,804	95,920,361
INTEREST:			
On long-term debt	24,942,281	25,029,257	25,559,725
Charged to construction - credit	(629,764)	(616,090)	(1,114,928)
On short-term debt	771,844	935,883	612,375
Net interest	25,084,361	25,349,050	25,057,172
Net operating margins	5,792,379	8,613,814	8,401,775
NONOPERATING MARGINS:			
Interest income	632,191	695,699	730,041
Other	520,414	566,908	351,586
Property gain (loss)	609,413	(45,050)	(477,209)
Assignable margins	7,554,397	9,831,371	9,006,193
Patronage capital at beginning of year	100,685,517	95,421,358	91,079,686
Retirement of capital credits and estate payments	(3,439,822)	(4,567,212)	(4,664,521)
PATRONAGE CAPITAL AT END OF YEAR	\$104,800,092	\$100,685,517	\$ 95,421,358

Years ended

CASH FLOW

Assignments

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S T A T E M E N T S O F C A S H F L O W S

Years ended December 31, 1997, 1996 and 1995

	1997	1996	1995
CASH FLOWS FROM OPERATING ACTIVITIES:			
Assignable margins	\$ 7,554,397	\$ 9,831,371	\$ 9,006,193
Adjustments to reconcile assignable margins to net cash provided by operating activities:			
Depreciation and amortization	23,532,263	23,221,162	21,846,611
Capitalized interest	(799,999)	(809,302)	(1,354,273)
Property (gains) losses and obsolete inventory write-off	(609,413)	45,050	477,434
Other	(241,317)	(265,643)	343,806
Changes in assets and liabilities:			
(Increase) decrease in assets:			
Special deposits	(62,471)	8,557	(44,332)
Accounts receivable	(8,629,254)	1,738,940	(3,492,435)
Notes receivable	-	-	2,533
Prepayments	135,886	(19,140)	194,790
Materials and supplies, net	568,507	2,311,191	1,527,094
Deferred charges	(2,299,547)	(4,581,795)	(2,222,963)
Other	(11,035)	117,829	(14,740)
Increase (decrease) in liabilities:			
Accounts payable	1,860,074	(1,481,316)	3,125,594
Accrued interest	(172,052)	(976,398)	(136,434)
Deferred credits	(755,366)	(8,023,874)	(3,274,768)
Consumer deposits, net	(28,665)	(52,150)	(73,789)
Other	(1,076,365)	5,956,463	389,099
Total adjustments	11,411,246	17,189,574	17,293,227
Net cash provided by operating activities	18,965,643	27,020,945	26,299,420
CASH FLOWS FROM INVESTING ACTIVITIES:			
Extension and replacement of plant	(17,487,859)	(20,605,093)	(22,058,887)
Decrease in investments in associated organizations	24,235	132,261	267,393
Net cash (used) in investing activities	(17,463,624)	(20,472,832)	(21,791,494)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Transfer to restricted construction funds	1,006,608	(1,371,386)	-
Net increase (decrease) in notes payable	(2,750,000)	(5,250,000)	500,000
Proceeds from long-term debt	15,000,000	45,000,000	10,000,000
Repayments of long-term debt	(10,957,586)	(42,429,853)	(8,312,527)
Memberships and donations received (refunded)	527,179	(16,768)	309,821
Retirement of patronage capital	(3,439,822)	(4,567,212)	(4,664,521)
Increase in (refunds) and transfers of consumer advances for construction	(1,083,688)	1,627,442	(1,309,828)
Net cash used by financing activities	(1,697,309)	(7,007,777)	(3,477,055)
Net increase (decrease) in cash and cash equivalents	(195,290)	(459,664)	1,030,871
Cash and cash equivalents at beginning of year	5,419,819	5,879,483	4,848,612
Cash and cash equivalents at end of year	\$ 5,224,529	\$ 5,419,819	\$ 5,879,483
Supplemental disclosure of cash flow information			
interest expense paid, net of amounts capitalized	\$ 25,256,413	\$ 26,325,449	\$ 25,193,606

Chugach has been participating in benchmarking projects for the past few years. One goal is to see how Chugach's efficiency compares to others for key activities. A second is to learn how to do a better job by learning from the "best performers" in a study.

Study participants vary in size and geographic location. Occasionally, results must be adjusted for unique operating conditions like Alaska weather. The process has returned steady benefits to Chugach.

Chugach's benchmarking efforts have helped lower costs and improve services. This report illustrates some of the ways benchmarking projects helped Chugach in 1997.

Mailroom operations

Each month Chugach mails tens of thousands of pieces of outgoing mail to consumers. The three primary cost drivers are materials, labor and machinery. An analysis in 1997 indicated that Chugach could save thousands of dollars by outsourcing the work, as many other benchmarking participants did. Chugach did just that, with estimated 1998 savings of 56 percent from 1997.

Mailroom operations

1997 Internal labor and machine costs

10.2¢ per piece

1998 Outsourced costs

4.5¢ per piece

Remittance processing

When a customer sends back a check along with the stub from their bill, someone must open the envelope, separate the items, reconcile the amounts and credit the account. This is remittance processing. Benchmarking identified this function as a source of probable savings and indeed, Chugach estimates it will save approximately 52 percent by outsourcing this function in 1998.

Remittance processing expense

1997 Internal costs

18.0¢ per piece

1998 Outsourced costs

8.8¢ per piece

Benchmarking highlights

Strategic alliances

Early in the year, Chugach signed strategic alliances designed to significantly cut purchasing, inventory and warehousing costs without affecting service. The alliances formed partnership arrangements between Chugach and major suppliers to provide mutual benefits.

Chugach was the first electric utility in Alaska to complete a strategic alliance with an electrical supplier.

The vendors came away with the certainty of sales. Chugach secured better unit prices and a promise that vendors would warehouse part of the inventory with a guarantee of quick delivery.

Chugach estimated it saved about \$1.1 million in 1997 due to these strategic alliances.

Reliability

Reliability is critically important to customers. In a 1997 benchmarking study, Chugach found that it had outstanding distribution system reliability compared to 21 electric utilities from the United States, Canada, the United Kingdom, Australia and New Zealand.

Chugach's distribution system reliability was excellent. The study authors identified it as "world class." Both the low frequency and short duration of Chugach's distribution system outages contributed to this designation.

However, that reliability came at a price that was high compared to other study participants – and illustrated the delicate balance between reliability and costs.

An interesting footnote: One of the other study participants was a New Zealand utility that serves Auckland. The core of that city has been suffering through a weeks-long outage in early 1998 caused by cable failures.

Warehouse

The long-term goal is to see how Chugach's efficiency compares to others for key activities. A second is to learn how to do a better job by learning from the "best performers" in a study.

Warehouse

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Glossary

Benchmarking

A systematic process of collecting data relating to the services and work processes of other electric utilities, for the purposes of comparison and the identification of best practices.

Best practices

Technological innovations and work processes which improve economic efficiency while maintaining established system reliability, safety, value and service to customers.

Outsourcing

Hiring an outside vendor to provide a service instead of doing it in-house.

Service connection

Installation of an electrical facility from an existing transformer, pole or other readily available power source to the customer's meter location.

Strategic alliance

A partnership relationship between a business and its suppliers which provides mutual benefits.

Turns

The number of times an inventory is "issued out" in a year. A higher number of turns indicates a more efficient use of the capital invested in inventory.

Unit price

A contractor price established for a particular electrical construction assembly for labor and material whereby the price can be used repeatedly for the same type of work on the project.

Warehouse inventory turns

The longer an item stays in warehouse inventory, the more costly it is. Chugach discovered it was well below the standard of the best performers when it came to inventory turns. The creation of strategic alliances in 1997 not only saved money by reducing unit costs, it helped improve warehouse turns. Chugach is encouraged by the progress it made in 1997, and is working toward a long-term goal of increasing turns to four (six for some items) per year.

Warehouse inventory turns



New service connections

A 1995 benchmarking study found Chugach's average service connection time in 1994 was approximately 6 days. At the same time, the "best performers" were averaging less than 5 days. Process evaluation and modification reduced the average installation time to approximately 5 days in 1996 – and an average of 3.6 days in 1997. Chugach's 1998 target is to complete new service installations within 5 days.

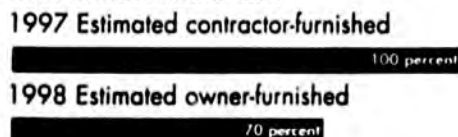
New service connection time



Owner-furnished material

The creation of strategic alliances in 1997 led to dramatic savings in the cost of materials, many of which are routinely used on construction projects. Chugach used to purchase materials for a project through its contractors. However, analysis determined Chugach could cut costs by furnishing contractors with materials – thereby avoiding both higher unit prices and markup. A test from August to October confirmed lower material costs without delay to a single project. This change is expected to provide significant savings in 1998.

Construction material costs



In June Chugach created an organization with the primary responsibility of ensuring that customers receive both innovative and responsive services. Chugach's marketing and customer services functions form the core of this new Retail Services organization. In addition, it also provides administrative, computer and public relations services and support throughout the company. Throughout the year, Retail Services worked to meet and exceed customers needs and expectations. In 1997 Chugach:

- Began a program which allows any customer to choose the date their monthly bill is due. Chugach was the first electric utility in Alaska to offer this program. By the end of the year more than 3,000 customers had chosen their own due date.



Chugach began offering gift certificates in time for the holidays, but the program is available year-round.



In August, Chugach launched a unique "flexible due date" program which allows customers to pick the day of the month their bill is due.

- Gave customers who choose to pay their coming year's bill in advance a \$25 discount.
- Initiated a year-round program which allows anyone to purchase gift certificates for customers.
- Performed 449 residential and 72 commercial energy audits for customers.
- Allocated \$8.2 million in 1996 retail capital credits and sent notices to members of record.



In the fall, Chugach began offering a \$25 discount to customers who want to pay their next year's bill in advance.



Chugach's home page (www.chugachelectric.com) recorded about 7,000 visits in 1997.

- Retired \$1.9 million in retail capital credits from 1983 and mailed checks to members of record.
- Received 134,052 calls through the Member Services Department during normal operations. Of those, 27,546 were handled by Chugach's interactive voice response system.
- Created a Marketing Department to develop and promote customer-focused services and provide special representatives for key commercial accounts.

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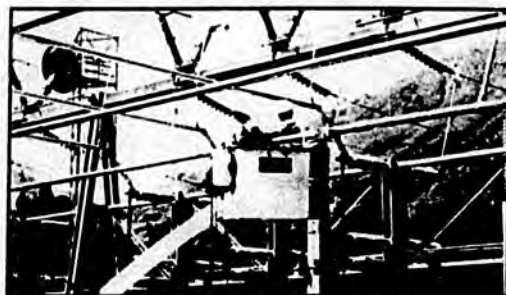
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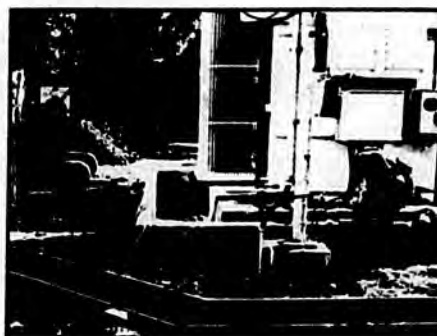
TRANSMISSION & DISTRIBUTION NETWORK SERVICES

As part of a June reorganization, Chugach created an area of the company to manage the infrastructure that links power plants to customers. Transmission & Distribution Network Services designs, builds, upgrades and maintains Chugach's "wires business" including substations. It also is responsible for electronic communications, the power control center and asset management. Among other projects, in 1997 T&D Network Services:

- Installed new 115-kilovolt breakers at the Daves Creek Substation.
- Replaced the 230-kv switches at the Point MacKenzie transmission substation.
- Completed 74 line extension projects, including several new subdivisions. Building activity increased throughout the Anchorage area in 1997.
- Developed a computer-assisted design system that allows distribution designers to create their own projects online, cutting the time required to complete a project.



New 115-kv breakers were installed at the Daves Creek transmission substation to improve operational reliability.

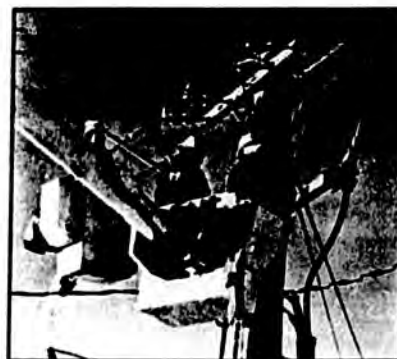


The Klatt distribution substation was expanded and upgraded in 1997.



A unique "construction performance guarantees" program promises to pay customers for projects delayed beyond agreed-upon dates, if Chugach is responsible.

- Rebuilt the Klatt Substation to provide improved service and expanded capacity.
- Replaced aging underground cable in Anchorage's Heather Meadows, Chugach Foothills and Bonibrook subdivisions, as well as Waldec trailer park.
- Reconductored approximately a mile of overhead 12.5-kv distribution line along 100th Avenue.
- Replaced aging distribution line to upgrade the service to an FAA radar facility at the Anchorage International Airport.
- Installed a trio of 115-kv switches to allow Chugach to sectionalize both the transmission and distribution systems at the Hope Substation.
- Responded to outages throughout the system including a December ice storm that snapped a 1,700-foot span of 115-kv conductor and dropped it into the steep and deep gorge of Canyon Creek.
- Cleared 131 line miles of transmission, and 122.5 line miles of distribution rights of way.



Chugach upgraded the three 12.5-kv feeders that serve the Anchorage International Airport in 1997.

1997's internal restructuring put the responsibilities for Chugach's financial performance and its present and future generation resources under a new organization called Finance & Energy Supply. It also manages corporate analysis and business planning, rates and economics functions, wholesale power contracts, and fuel supply contracts. While many of the group's activities are covered throughout this annual report, this page highlights the generation resources Chugach uses to ensure reliable, affordable power.

Chugach has 513.1 megawatts of installed capacity as detailed below. The ratings are taken at 30 degrees Fahrenheit. Chugach also takes power from the state-owned Bradley Lake hydroelectric project near Homer.



BELUGA

- Located on the west side of Cook Inlet near Tyonek
- Combustion turbines 1 – 7 fueled by natural gas
- Unit 8 is steam turbine

Units	Commissioned	Power Rating
No. 1	1968	15.7 megawatts
No. 2	1968	15.7 megawatts
No. 3	1972	64.7 megawatts
No. 5	1975	66.5 megawatts
No. 6	1975	74.0 megawatts
No. 7	1978	74.0 megawatts
No. 8	1981	55.0 megawatts
Total		365.6 megawatts



BERNICE LAKE

- Located near Nikiski on the Kenai Peninsula
- Natural gas combustion turbines

Units	Commissioned	Power Rating
No. 2	1971	19.0 megawatts
No. 3	1978	25.5 megawatts
No. 4	1981	25.5 megawatts
Total		70.0 megawatts



INTERNATIONAL

- Located off International Airport Road in Anchorage
- Natural gas combustion turbines

Units	Commissioned	Power Rating
No. 1	1964	15.0 megawatts
No. 2	1965	15.1 megawatts
No. 3	1969	18.5 megawatts
Total		48.6 megawatts



COOPER LAKE

- Located near Cooper Landing on the Kenai Peninsula
- Hydro-turbines

Units	Commissioned	Power Rating
No. 1	1960	8.6 megawatts
No. 2	1960	8.6 megawatts
Total		17.2 megawatts



EKLUTNA

- Former federal hydroelectric project along the Knik River
- Jointly owned with Anchorage Municipal Light & Power and Matanuska Electric Association
- Chugach's share is 30%, 11.7 Mw maximum.

Units	Commissioned	Power Rating
No. 1	1955	23.5 megawatts
No. 2	1955	23.5 megawatts
Total		47.0 megawatts

Chugach average
1997, down from
5-year average
2.54 hours in

INDEX

AUDIT

KPMG Peat
601 West 5
Anchorage,
(907) 276-

CORP

INFO

Chugach El
Member &
P.O. Box 1
Anchorage,
(907) 762-
FAX (907)

INVE

INFO

Chugach I
Corporate
P.O. Box 1
Anchorage,
(907) 762-
FAX (907)

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Chugach averaged 1.24 outage hours per customer in 1997, down from 2.7 outage hours in 1996. The 5-year average for consumer outage hours declined to 2.54 hours in 1997 from 6.5 hours in 1996.

INDEPENDENT AUDITORS

KPMG Peat Marwick
601 West 5th Avenue, Suite 700
Anchorage, Alaska 99501-2258
(907) 276-7401

CORPORATE INFORMATION

Chugach Electric Association, Inc.
Member & Public Relations Department
P.O. Box 196300
Anchorage, Alaska 99519-6300
(907) 762-4736
FAX (907) 562-0027

INVESTOR INFORMATION

Chugach Electric Association, Inc.
Corporate Planning & Analysis
P.O. Box 196300
Anchorage, Alaska 99519-6300
(907) 762-4740
FAX (907) 562-0027

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Bradley/Reid Communications

Paper, inks, and recycling information

The 1997 Chugach Annual Report was printed in Alaska with environmentally friendly vegetable based inks. The report is printed on 80 lb. text Topkote, coated paper stock, containing 50 percent recycled fiber with a minimum of 10 percent post-consumer waste. Recycle with white paper.

KEY COMPARISONS

Services at year end

1996 67,176
1997 68,183 1.5% increase

Kilowatt-hours sold

1996 2.22 billion
1997 2.27 billion 2.4% increase

Retail kwh

1996 1.01 billion kwh
1997 1.03 billion kwh 1.3% increase

Wholesale kwh

1996 957.3 million kwh
1997 961.2 million kwh 0.4% increase

Economy energy kwh

1996 246.1 million kwh
1997 283.0 million kwh 15.0% increase

Total revenue

1996 \$136.1 million
1997 \$145.7 million 7.1% increase

Expenses

1996 \$126.3 million
1997 \$138.2 million 9.4% increase

Margins

1996 \$9.8 million
1997 \$7.5 million 23.2% decrease

Cost per residential kwh in December (all "per kwh" charges)

1996 8.5152¢
1997 8.9637¢ 5.3% increase

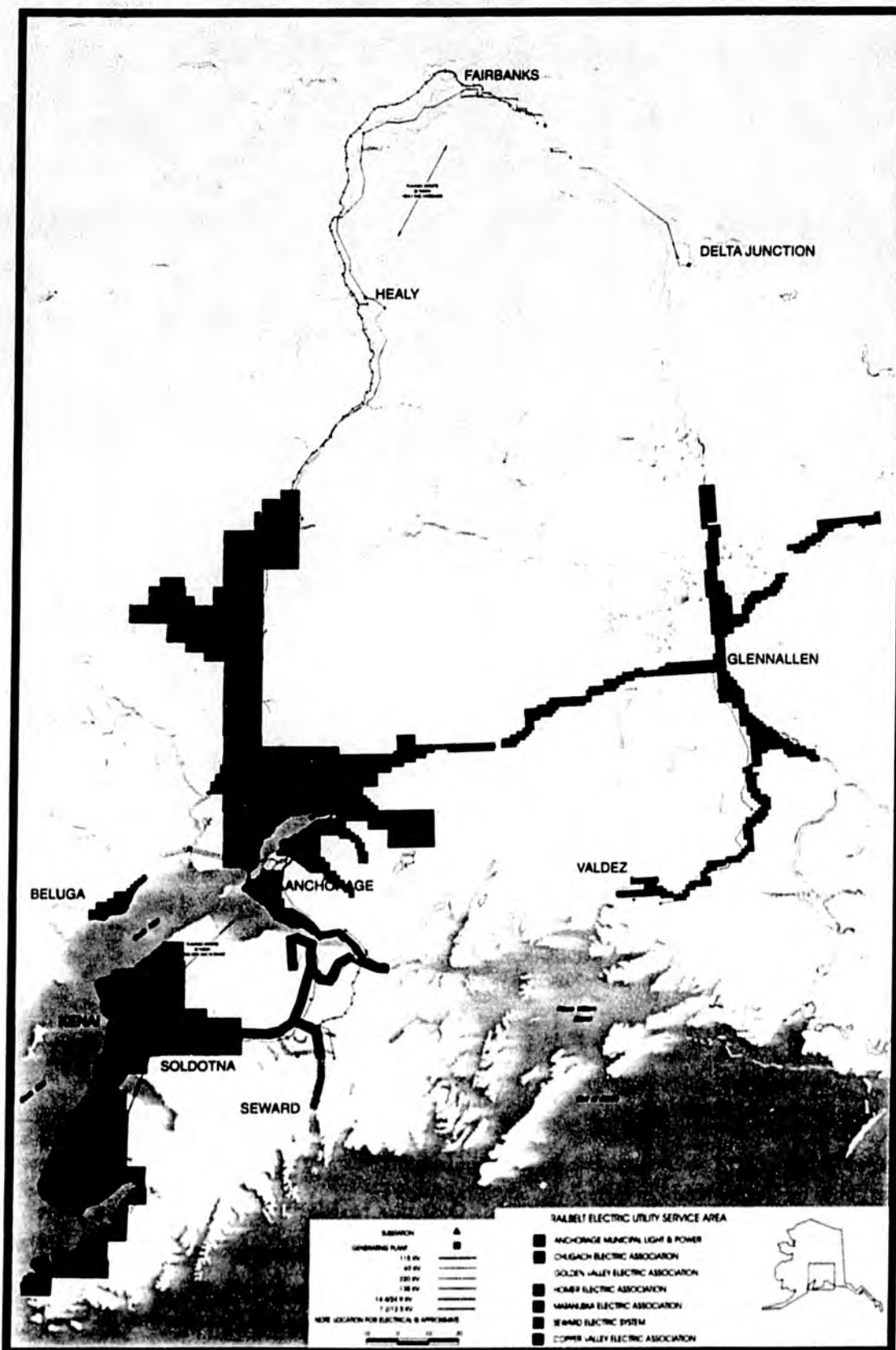
Note: 1996 U.S. Average 8.36¢ per kwh

Cost of 750 kwh of residential service in December

1996 \$70.10
1997 \$73.48 4.8% increase

Change in Anchorage consumer price index Up 1.2% for 1997 (CPI)

THE CHUGACH SYSTEM



Chugach power flows to nearly three-fourths of Alaska's population. Chugach serves more than 68,000 metered retail locations in a service territory which extends from Anchorage to the northern Kenai Peninsula, and from Whittier on Prince William Sound to Tyonek on the west side of Cook Inlet. Chugach provides power to Alaskans from Homer to Fairbanks through sales to wholesale and economy energy customers: Matanuska Electric Association, Homer Electric Association, the City of Seward, Golden Valley Electric Association and Anchorage Municipal Light & Power.

Chugach has 513.1 megawatts of installed generation capacity at five power plants. Chugach operates 1,973 miles of energized line, comprised of 402 miles of transmission line, 931 miles of overhead distribution line and 640 miles of underground distribution line.

Chugach's 1997 system peak load of 397 megawatts occurred between 6 p.m. and 7 p.m. on Jan. 7. Power sales for the year totalled 2.27 billion kilowatt-hours. Chugach finished 1997 with total revenues of \$145.7 million and margins of \$7.5 million.

Questions

Why is there discussion about restructuring the industry at all?

Is there any reason to think that will happen?

What are other states doing?

Could Alaska's electrical infrastructure support competition?

Do people in Anchorage want customer choice?

What about rural Alaska?

Will providing customer choice lead to lower bills for customers?

Answers

Across the country, customers have begun demanding the right to choose the company they buy power from in an attempt to save money and improve services.

At one time, the airline, natural gas, telephone and trucking industries were all regulated. Studies have shown that overall, customers have benefited from the deregulation of these industries.

Nearly all states are addressing electric utility restructuring.

Although Alaska is not electrically linked to the Lower 48, the Railbelt region is interconnected in a power grid that stretches from Homer to beyond Fairbanks. Wholesale competition has worked in the Railbelt. Within this region, six electric utilities currently provide retail service, and there are multiple sources of generation. Anchorage in particular seems like a logical place to introduce retail customer choice.

A 1998 survey revealed that about 90 percent of Anchorage residents feel they should be able to choose the company which provides their electric power.

The retail electric competition that is being discussed for the Railbelt and Lower 48 is really only practical on an interconnected grid. Bush utilities are usually isolated, stand-alone systems not linked to a grid.

Probably. While it's difficult to say just how much a given customer might save, it's clear that just the threat of competition has led Railbelt utilities to voluntarily cut costs and pass savings on to customers in recent years. It's reasonable to expect that to continue.

Questions

Would customers see any benefits other than lower prices?

Would restructuring the Alaska electric industry mean we'd have more wires and poles?

Who would respond in case of a power outage?

What would it take to make it possible for individual customers in Anchorage to choose their power supplier?

Without regulation, what would control prices?

Answers

As in other industries that have gone through deregulation, customers would no doubt see improved service offerings and other benefits. Once again, some of this has already begun as utilities prepare for the day customers will be allowed to choose their power provider.

Not unless the Legislature goes beyond the retail energy sales competition under discussion in most other parts of the country to require competition in the transmission and distribution systems. Most people feel that the "wires" part of the utility business will continue to be non-competitive and regulated by the Alaska Public Utilities Commission to prevent the duplication of infrastructure and set fair "wheeling" charges for the use of a company's system.

The same people who do today. If an outage happened at a power plant, the employees at the plant would take care of it. If it happened because of a problem on the transmission or distribution system, owners of that system would take care of the problem — just as they do today.

Action by either the Legislature or the Alaska Public Utilities Commission could allow customers to choose. To date the Alaska Public Utilities Commission has blocked initial efforts to bring competition to Anchorage. A clear statement from the Legislature in support of competition would provide helpful guidance to the APUC as it considers future proposals to make customer choice a reality.

Market forces have proven effective at controlling prices in almost every other area of the American economy, including critical functions such as food, fuel, and transport. There is no reason to think they would not work in the electric business as well. Once customers are given the power to choose, it is logical to think that providers will need to keep prices competitive in order to keep customers.

With a combination of innovative customer services, excellent reliability and reasonable rates, Chugach plans to meet the needs of its customers today and the demands of a competitive marketplace in the future once customers in Alaska are free to choose their electric supplier. To learn more about Chugach, visit the utility's award-winning homepage at www.chugachelectric.com.

Innovative

Chugach Electric Association is Alaska's largest electric utility. It's also an innovative provider of services to its customers.

For instance, any customer can pick the day of the month they'd like their bills to come due, under the flexible payment due date program. Construction performance guarantees assure a customer that the utility will complete line extensions or service connections by an agreed upon date, or begin paying them for the inconvenience. (Assuming the delay is caused by something under Chugach's control.) Chugach's "electric check" program lets customers tailor billing and payment options using a range of choices. And summary billing creates a single sheet bill that lets customers with multiple accounts make comparisons and a single monthly payment — while still providing the individual account detail on accompanying pages.

Programs like these and others have led to consistently high approval ratings for Chugach in customer surveys. The utility is also the leader in advocating for change in Alaska's electric utility industry.

Energy

Chugach uses a mix of natural gas and hydroelectric resources to provide clean, reliable, affordable energy. Chugach owns and operates four power plants of its own — including Beluga, the largest power plant in the state. It is a co-owner of a hydroelectric project purchased from the federal government in 1997. Chugach also takes the largest single share of the State-owned Bradley Lake hydroelectric project and dispatches a single-turbine plant owned by another utility.

Chugach operates 1,973 miles of transmission and distribution line.

Most of Chugach's power comes from gas-fired turbine-generators. In 1997, 91 percent of the kilowatt-hours it sold were produced using natural gas as a base fuel for either single or combined-cycle combustion units. The other 9 percent came from hydro resources.

With most of its power coming from gas turbines, a steady supply of natural gas is crucial to Chugach. The utility has long-term contracts with multiple suppliers that will provide a stable, reliable, reasonably priced supply of fuel until at least the year 2015.

In addition to its gas-fired and hydroelectric generation, Chugach is pursuing on-site fuel cell projects, and is investigating the practicality of wind turbines to meet customer desires.

Despite the challenges of operating in Alaska, Chugach customers pay rates that are in line with the national average and enjoy very reliable service. In 1997 Chugach averaged only 1.24 outage hours per consumer — which translates to power being on 99.99 percent of the time.

Choice

Chugach has been virtually alone in saying that individual customers should have the right to choose the company that provides their electric service. The utility has championed customer choice before both the Legislature and the Alaska Public Utilities Commission. That position is in line with repeated public opinion surveys that show that more than 90 percent of customers think they should have the right to choose their power provider.

Chugach serves a retail customer base of 55,000 members at 68,000 metered locations. Chugach provides power to about two-thirds of the homes and businesses in Anchorage. In addition, Chugach provides power for Alaskans throughout the Railbelt region through wholesale and economy energy sales to other utilities from Homer to Fairbanks.



ENERGY

Power Unbound

STATE BY STATE

Where deregulation currently stands across the country

—Compiled by the STAFF OF DOW JONES NEWSWIRES—

ALABAMA

A 1996 law set up a mechanism for utilities to recover stranded costs, or expenses incurred under regulation that could not easily be recovered under competition. The Public Service Commission is studying competition but has set no date to begin deregulation.

ALASKA

The state's largest utility, Chugach Electric Association, has urged the Public Utility Commission and legislators to allow retail electric competition in Anchorage and surrounding areas.

ARIZONA

Under a law signed in May, competition will be phased in starting at year's end, with 20% of public power customers getting the freedom to choose providers, and full competition arriving by Jan. 1, 2001.

ARKANSAS

The Arkansas Public Service Commission last fall approved a settlement with Entergy Arkansas Inc., the state's largest utility, that included a rate cut followed by a freeze until 2001, with no date set for competition. The commission held a hearing on deregulation in May and will submit a report to the Legislature when it meets next year.

CALIFORNIA

California has been one of the fastest-moving states on competition. On April 1, millions of electricity customers in California gained the right to choose their power suppliers. Customers within the territories of municipal utilities are to follow by 2002. But an initiative on the ballot this November would undo key parts of the restructuring. If the initiative passes, the courts could spend years deciding who will repay bonds that were issued to pay for stranded costs and rate cuts.

COLORADO

year. The rest of the state's customers will be able to choose as of July 1, 2000. The issue of stranded costs hasn't yet been resolved.

DELAWARE

A bill seeking to open the state's power business to competition failed to reach a vote in the state Senate in June. No action is expected before the next legislative session, which starts Jan. 1, 1999.

FLORIDA

A bill to offer retail choice to consumers starting Jan. 1, 2001, was introduced earlier this year in the Florida Legislature, but wasn't passed. Opponents appear likely to keep the upper hand.

GEORGIA

The Public Service Commission released its blueprint for studying retail competition earlier this year and forwarded it to the Legislature. Lawmakers haven't yet acted on it, but the commission plans to continue working on major issues, including reliability of service and stranded costs.

HAWAII

In response to a request from the Legislature, which wants competition to start in December, the Public Utility Commission is drafting a restructuring plan and formally investigating the issues surrounding retail electric competition.

IDAH

Idaho is awaiting more signals from the federal government on nationwide policy before moving forward on its own. Washington Water Power and Idaho Power have offered choice pilot programs for their retail cus-

2002. The law also allows utilities to recover stranded costs.

INDIANA

Legislation that would have set up an independent system operator to supervise access to transmission lines failed to pass the state Senate by a narrow margin in February. Supporters agreed to rewrite parts of the bill to increase the chances of passage in the next session, which starts in January.

IOWA

The 1999 legislative session is expected to focus on restructuring, but appears unlikely

KENTUCKY

Legislation passed earlier this year established a task force to study deregulation. The task force will begin meeting next month and has to report to the Legislature and governor by Nov. 15, 1999.

LOUISIANA

The state's Public Service Commission is holding hearings that may lead to the setting by year's end of a date for competition. The commission is expected to lead the effort to restructure the industry in Louisiana.

MAINE

mission's order, but will probably try again next year.

MASSACHUSETTS

Full competition began March 1, 1998, under a deregulation law signed last fall. A referendum on whether to repeal the current deregulation law goes before voters in November. Some electricity marketers complain that they have been priced out of the market for now by provisions of a state-mandated 10% rate cut.

MICHIGAN

Though no comprehensive legislation has been introduced to date, many draft bills have been circulated to forge consensus. And the state's Public Service Commission in January approved a restructuring plan; it would take effect 30 days after federal approval, but is being appealed by the state's utilities.

MINNESOTA

The Minnesota Legislature this spring approved the creation of a task force on electric restructuring, expected to report back in January 1999.

MISSISSIPPI

The Mississippi Public Service Commission has ordered the state's two largest investor-owned utilities, Entergy Mississippi Inc. and Mississippi Power, to prepare market and reliability studies to be considered before year's end. Legislative action isn't expected until 1999, though Jan. 1, 2001, is the proposed date to allow full retail competition.

MISSOURI

A task force created by the Missouri Public Service Commission presented its final report in May without reaching agreement on

tail pilot programs for smaller customers expected to start in late 1998.

NEBRASKA

The Legislature is awaiting the results of an advisory panel's study of the state's power industry, scheduled to be completed by the end of next year.

NEVADA

The Public Utilities Commission is working on a list of electricity services it believes could be open to competition, and is considering how to set policy. By law, all customers will be able to choose a power provider no later than Dec. 31, 1999, unless the commission determines that a different date is in the public interest.

NEW HAMPSHIRE

Retail competition was scheduled to begin July 1, but it was put on hold due to litigation in a Public Service Co. of New Hampshire restructuring case.

NEW JERSEY

The state's Board of Public Utilities this month expects to submit to legislators its plan to deregulate the retail power market in 1999. A vote is expected by Thanksgiving.

NEW MEXICO

In January, a restructuring bill failed to make it out of a legislative committee. Another bill is expected to be introduced in January 1999.

NEW YORK

Utilities in several parts of the state have started offering customers the chance to choose their power provider under terms of a 1996 order issued by the state's Public Service Commission.

NORTH CAROLINA

The General Assembly last year created a task force to study electric deregulation. An independent assessment commissioned by



Under a measure passed by the Legislature earlier this year, a 30-member panel will study whether competition is in the best interests of electricity consumers and the state. The final report is to be released no later than Nov. 1, 1999.

CONNECTICUT

On Jan. 1, 2000, 35% of customers in 25 "distressed municipalities" will get a choice of providers under a law passed earlier this

year. In 1999, but only in three of them, programs statewide is limited.

ILLINOIS

Illinois enacted a deregulation plan in December 1997 that mandated rate cuts of 5% to 20% across the state, starting last month. Large industrial and commercial customers will begin choosing suppliers on Oct. 1, 1999; smaller ones, no later than December 2000; and residential customers, on May 1,

no later than December 2000. The company has proposed two open-access retail pilot programs, the first such programs in Iowa. The company is awaiting regulatory approvals.

KANSAS

The Legislature considered two deregulation bills in its 1998 session, but didn't pass either. Any movement in that direction is likely to be slow.

During 1999, the Public Service Commission will require providers to "unbundle" bills, itemizing the cost of generation and transmission, with competition starting in March 2000.

MARYLAND

Under a Public Service Commission order, competition would be phased in starting July 1, 2000. Lawmakers in the 1998 session failed to pass a bill based on the com-

mission's recommendation. No regulatory action is expected this year.

MONTANA

Montana's large electricity customers gained the right to choose their power providers on July 1, starting a transition period scheduled to end July 1, 2002, when retail customers statewide will be able to choose electricity suppliers. The state's Public Service Commission will oversee re-

structuring. The task force will issue a final report in January 1999.

NORTH DAKOTA

The North Dakota Public Service Commission has begun a general study of restructuring. No action is expected soon.

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THE FEDERAL SOLUTION

Congress hopes to avoid a patchwork quilt of state regulations by coming up with more-uniform rules. It won't be easy.

By BRYAN LEE

THE PROSPECT of restructuring the nation's \$200 billion electricity sector—and ending the last of the legally sanctioned monopoly industries in the U.S.—has generated a high-voltage debate in Congress.

At least 20 electricity restructuring legislative proposals are under consideration by the House and Senate, ranging from narrowly focused bills to comprehensive measures that would require retail power competition to be in place nationwide by a certain date.

The congressional interest is being sparked by state efforts to restructure electricity markets. In high-cost states such as California, Massachusetts, Pennsylvania and Rhode Island, regulators and legislators have mandated retail electric competition, with the expectation that replacing monopoly service territories with competition will lower costs to customers.

Many of the congressional proposals look to enact a similar electric industry restructuring nationally, while "grandfathering" existing state competition programs. Federal policy makers argue that a national law is necessary to avoid a "patchwork quilt" of differently structured state power markets.

The proposed bills differ on many points, but in the main they address the same handful of troublesome issues: from environmental concerns to "stranded" costs to how much federally marketed power should cost. Here's a breakdown of the big questions that lawmakers are tussling with.

LIFETIME LIMITS

One of the thorniest issues facing lawmakers is the 1935 Public Utility Holding Company Act, known by its acronym Puhca. (The pronunciation, either

"pooka" or "pyooka," often depends on what side of the debate you're on.)

Puhca restricts the operations of multistate utility holding companies. The law says such companies can't diversify much beyond their core utility and natural-gas holdings, providing a barrier not only to utility-company diversification but also to the entry of nonutility companies into the electricity business. Utilities can't have holdings that aren't geographically integrated (for instance, a California utility couldn't own a utility in New York, and vice versa), and their moves—such as mergers and acquisitions—are subject to the approval of the federal government.

Multistate utilities have argued that this structure gives single-state operators a tremendous advantage as the industry becomes competitive. Single-state companies aren't hung up by federal red tape, and in some cases they also have accumulated diverse assets, such as MidAmerican Energy Co., an Iowa utility that recently acquired a regional real-estate company.

But industrial energy customers, power marketers and consumer groups have lobbied fiercely against repeal of Puhca—unless utilities are forced to open their territories to retail competition. A simple repeal of Puhca, these critics argue, would only open the door for the same abuses—such as concentration of market power and risky, speculative investments at customers' expense—that caused Congress to enact the law in the first place.

One of the biggest proponents of eliminating Puhca has been the enforcer of the law: the Securities and Exchange Commission. Puhca, the SEC maintains, has been superseded by other securities law and is redundant.

The argument came to a head in this Congress

when Republican Sen. Frank Murkowski of Alaska, the chairman of the Senate Energy Committee, supported a bill reported out of the Senate Banking Committee to do away with the decades-old law.

And Senate Majority Leader Trent Lott, a Mississippi Republican who has two utility holding companies in his state, tried to bring the Puhca bill to the Senate floor for a vote earlier this year.

Spearheading the opposition was Democrat Dale Bumpers of Arkansas, who had introduced the first comprehensive electricity-restructuring bill of the current Congress. The senator threatened a filibuster to block the bill; after it became clear Sen. Lott didn't have enough votes to override Sen. Bumpers' opposition, Sen. Lott abandoned his efforts.

RECOVERING STRANDED COSTS

One of the biggest arguments in the debate is over stranded costs—investments that utilities made as monopolies that can't be recovered in a competitive environment. Utilities insist they be guaranteed recovery of investments incurred under the regulated regime that may become stranded in the move to competition.

Most of the states that so far have moved to enact retail electricity competition have provided utilities the right to recover their investment, typically through a state-supported bond issue funded through a surcharge attached to electricity sales.

Utilities want stranded-cost recovery enshrined in federal legislation, and Sen. Bumpers obliged them in his bill with strong language guaranteeing cost recovery.

But a different bill, backed by Republican Rep. Dan Schaefer of Colorado, chairman of the House Energy and Power Subcommittee, and Rep. Thomas Bliley, the Virginia Republican who heads the Commerce Committee,

would leave most decisions about stranded-cost recovery to the states. This causes heartburn for utilities, since at least one state—New Hampshire—has moved to limit utilities to recovery of only 50% of their stranded investment. Litigation over that provision has stalled the state's retail-restructuring initiative.

KEEPING CLEAN

In Washington, the fight over stranded costs is nearly overshadowed by a looming battle over environmental issues, thanks to the 1990 Clean Air Act amendments and the 1978 Public Utility Regulatory Policies Act. Puhca, as the law is called, is a vestige of a spate of laws Congress passed in the wake of the energy crisis of the 1970s.

Anticipating that the crisis would turn chronic, the law requires utilities to buy power from generating facilities that use so-called renewable energy sources to generate electricity, or that meet certain efficiency standards through cogeneration—the simultaneous generation of both electricity and steam energy to drive industrial processes. (Puhca also inadvertently represented the first breach in the utility industry's protected monopoly status by creating a foothold for a competitive generation industry.)

The problem: Utilities have to buy that power at "avoided cost" rates—the amount that the utilities would have had to pay to generate that power themselves. But the rates were figured in the early 1980s, when energy prices were skyrocketing. Since then, of course, prices have plunged. So the utilities are now paying far above

their current avoided-cost rates for power.

Therefore, the utilities argue, if their territories are opened up to competition, they'll have to spread those costs among a shrinking customer base.

Utilities want Puhca to go away before competition arrives. But environmentalists have put up a tremendous fight, because the law promotes nonpolluting "renewable" energy sources, such as wind and solar power. Without Puhca, they argue, the electric industry—already the nation's leading source of air pollution—would be much dirtier.

The leading House compromise restructuring bill and the White House's proposal both would replace Puhca with a "renewable portfolio standard" designed to establish a market-based incentive for non-fossil-fuel generation. The proposals would establish a set percentage of a power companies' generation portfolio that must be derived from renewable sources. If a generator doesn't have enough renewables in its portfolio, it would be free to buy "credits" from a generator that exceeds the portfolio standard. (A similar market-based approach to curbing utilities' acid-rain emissions is part of the 1990 Clean Air Act amendments.)

But the environmental lobby wants more—and that's proving a major stumbling block to legislation. In addition to a mandate for wind and solar technologies, environmentalists are lobbying fiercely to make air pollution a central part of the restructuring debate. At the core of the fight is a provision in the Clean Air Act that exempted certain older, coal-fired power plants from meeting the emissions standards required of newer generating facilities. This, the environmentalists argue, gives "dirty" power plants a competitive advantage over clean generation facilities. In a cutthroat, deregulated industry, utilities would have an economic incentive to in-

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STATES

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OHIO

Companion deregulation bills that have been called the most pro-consumer in the U.S. were introduced in both houses of the Legislature in March. Under the plan they outline, opposed by utilities, full retail competition would begin Jan. 1, 2000. Lawmakers have held informal talks on the bills through their summer recess; the Legislature will reconvene later this month. In addition, utilities in August outlined their own plan calling for choice by 2001.

OKLAHOMA

Under terms of a 1997 law, competition is to start by July 1, 2002. The Oklahoma Corporation Commission is still working on three of four deregulation studies that the law requires to be completed by Oct. 1, 1999.

OREGON

Oregon's Public Utility Commission is conducting two pilot programs. But political momentum toward deregulation is slow in the state, which enjoys low power rates due in part to the presence of the Bonneville Power Administration's federally owned hydroelectric system.

PENNSYLVANIA

Under a 1996 law, the deregulation started July 1, 1998, with customers beginning to be in the first wave able to choose suppliers. Actual retail competition for customers will begin Jan. 1, 1999. By 2000, all customers will be able to choose.

RHODE ISLAND

Full competition started Jan. 1, 1998, 18 months ahead of the schedule established by the state's 1996 Utility Restructuring Act.

SOUTH CAROLINA

Deregulation legislation is expected to be introduced next year, as it was in 1997. The outlook remains uncertain. In February, the Public Service Commission outlined a plan to implement restructuring if legislation is adopted, but the commission didn't start retail competition.

SOUTH DAKOTA

South Dakota's Public Utility Commission is studying progress on retail competition compared to other states.

TENNESSEE

Legislation creating a committee to study deregulation passed last year, but there is scant impetus for the state to move forward because the vast majority of its electricity comes from the federal Tennessee Valley Authority.

thority. The fate of the TVA will be determined by federal deregulation legislation.

TEXAS

The Legislature, which didn't tackle deregulation until late in its 1997 session, is expected to take another look when it next meets, in 1999. In the meantime, the Public Utility Commission has negotiated lower rates with major utilities to prepare them for competition.

UTAH

The Legislature hoped to pass a deregulation measure last year, but a task force concluded more time was required. Meanwhile, the Public Service Commission has been issuing reports this year on a variety of issues raised by deregulation. The Legislature will use the reports to weigh whether it moves forward with deregulation.

VERMONT

The state Senate last year adopted much of a plan proposed by the Department of Public Service, but the House declined to vote on it. The governor in July appointed a five-member panel to study the issue and make recommendations by December, before the Legislature meets again in January.

VIRGINIA

The governor in April signed a bill establishing a time frame for deregulation. The plan

calls for deregulation to begin Jan. 1, 2002, and for retail competition to begin Jan. 1, 2004. A Legislative committee is studying several issues related to deregulation, including stranded costs.

WASHINGTON

Washington's Legislature passed two laws on power restructuring in its 1998 session. One gives consumers access to information on the financial position of utilities and details of their customer-service agreements. The other calls for a study of current electric rates. Neither measure provides for retail competition.

WEST VIRGINIA

The Legislature earlier this year authorized the Public Service Commission to devise a restructuring plan. The plan will require approval by the Legislature, though the commission will be able to modify or rescind it.

WISCONSIN

The Public Service Commission has placed deregulation on hold until it resolves the issue of service reliability under competition.

WYOMING

The Public Service Commission is studying how consumers can be protected and reliability preserved under competition, and how utilities should be compensated for stranded costs.

**ATTITUDES TOWARDS COMPETITION IN
THE ELECTRIC INDUSTRY**

February 1998

Chugach Electric

Attachment A

**INTRODUCTION AND
METHODOLOGY**

CORRECTION

**THE FOLLOWING DOCUMENT(S)
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**ATTITUDES TOWARDS COMPETITION IN
THE ELECTRIC INDUSTRY**

February 1998

Chugach Electric

Attachment A

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**INTRODUCTION AND
METHODOLOGY**

INTRODUCTION AND METHODOLOGY

This project was conducted between February 9th and 15th, 1998. One thousand four hundred registered voters in the Municipality of Anchorage participated in the study. A sample size of 1,400 yields a maximum margin of error of $\pm 2.62\%$ at 95% confidence. In other words, we can be 95% sure that our results differ from their true population proportions by no more than 2.62% on either side.

Respondents were drawn randomly from registered voters lists generated to produce voter households that had voted in the General Election in 1996. The respondents were screened to ensure their status as utility decisionmaker in the household, and the ensure the household paid their own electric bills.

Fielding was conducted by telephone from our centralized facility in Anchorage. Collected data has been data entered, verified, checked for accuracy and coded, and processed using SPSS, a standard statistical package for survey research. The elements of this report include the questionnaire in its final form, collated with the frequency results for each question, and a crosstabulation section that breaks the sample down into core groups.

One hundred respondents were surveyed from each of the 14 Legislative House Districts in Anchorage, numbered 10 to 23. These House Districts paired into 8 Senate Districts, lettered E to L, with District 10 and District 23 not paired with other Anchorage districts.

Quality control measures were taken to ensure as high a response rate as possible for this study. These included supervision of interviewers, repeated callbacks, calling at various times of day and evening, over the course of the fielding period. As a result, we can be very confident of the accuracy of results within the statistical margin of error.

**QUESTIONNAIRE AND
FREQUENCIES**

ATTITUDES TOWARDS COMPETITION IN THE ELECTRIC INDUSTRY

IVAN MOORE RESEARCH

TEL: 278-4600

Hello, my name is _____ and I'm calling for Ivan Moore Research, an Anchorage marketing research firm. We are conducting an Anchorage area public opinion survey concerning your household's utility services that should take no more than a few minutes. Your opinions are important to us, and we'd really appreciate your participation. (PAUSE)

S1. Is this a residential telephone?

IF "YES", CONTINUE...

IF "NO", TERMINATE...

S2. I need to speak with the person in your household who pays your utility bills, or who makes decisions about utility services. Would that be you?

IF "YES", CONTINUE...

IF "NO", ASK FOR PERSON...

S3. Do you pay your own electric bill or do you have a landlord that pays it for you?

IF "YES", THEN PROCEED...

IF "DON'T PAY ELECTRIC BILL/LANDLORD PAYS", THEN TERMINATE...

1. Which company provides your household with its electric service, Chugach Electric or ML+P?

	FREQUENCY	PERCENT
CHUGACH.....	1016.....	72.6%
ML+P.....	384.....	27.4%

OK, across the country, efforts are underway to allow individual customers to choose their electric provider. In Alaska, both the Legislature and Public Utilities Commission are now reviewing this issue. I'd like to ask you a few questions to see how you feel about this topic.

2. First, do you think that customers should have the right to choose which company they buy their electric power from?

	FREQUENCY	PERCENT
YES.....	1272.....	90.9%
NO.....	76.....	5.4%
DON'T KNOW.....	52.....	3.7%

3. Do you think competition in the electric industry would result in lower electric prices?

	FREQUENCY	PERCENT
YES.....	1032.....	73.7%
NO.....	233.....	16.7%
DON'T KNOW.....	135.....	9.6%

4. Do you think competition in the electric industry would result in better services?

	FREQUENCY	PERCENT
YES.....	1017.....	72.7%
NO.....	247.....	17.7%
DON'T KNOW.....	135.....	9.7%

5. If you could get better services or lower prices from a different power provider, would you want to be able to switch?

	FREQUENCY	PERCENT
YES.....	1276.....	91.1%
NO.....	80.....	5.7%
DON'T KNOW.....	44.....	3.2%

6. If a legislator were to vote in favor of allowing customers to choose their power supplier, would that make you feel more positive or more negative toward that legislator?

	FREQUENCY	PERCENT
MORE POSITIVE.....	904.....	64.6%
MORE NEGATIVE.....	71.....	5.1%
NO DIFFERENCE.....	425.....	30.3%

The following questions are for statistical purposes only.

7. In what year were you born?

	FREQUENCY	PERCENT
18-39.....	445.....	31.8%
40-47.....	332.....	23.7%
48-57.....	327.....	23.4%
58+.....	296.....	21.2%

(Mean = 47.7 years)
(Median = 45.8 years)

8. Of the people currently living in your household, how many are children or adolescents aged 18 or under?

	FREQUENCY	PERCENT
None.....	766.....	54.7%
One.....	222.....	15.9%
Two.....	273.....	19.5%
Three or more.....	139.....	9.9%
(Mean = 0.89 children)		

9. Are you married or single?

	FREQUENCY	PERCENT
MARRIED.....	1079.....	77.1%
SINGLE.....	321.....	22.9%

10. GENDER...

	FREQUENCY	PERCENT
MALE.....	700.....	50.0%
FEMALE.....	700.....	50.0%

Thankyou very much for your help. Goodbye.

THE FOLLOWING VARIABLE WAS RECORDED FROM THE VOTER LIST:

	FREQUENCY	PERCENT
House District 10.....	100.....	7.1%
House District 11.....	100.....	7.1%
House District 12.....	100.....	7.1%
House District 13.....	100.....	7.1%
House District 14.....	100.....	7.1%
House District 15.....	100.....	7.1%
House District 16.....	100.....	7.1%
House District 17.....	100.....	7.1%
House District 18.....	100.....	7.1%
House District 19.....	100.....	7.1%
House District 20.....	100.....	7.1%
House District 21.....	100.....	7.1%
House District 22.....	100.....	7.1%
House District 23.....	100.....	7.1%

THE FOLLOWING VARIABLE WAS COMPUTED FROM THE PREVIOUS VARIABLE:

	FREQUENCY	PERCENT
Senate District E.....	100.....	7.1%
Senate District F.....	200.....	14.3%
Senate District G.....	200.....	14.3%
Senate District H.....	200.....	14.3%
Senate District I.....	200.....	14.3%
Senate District J.....	200.....	14.3%
Senate District K.....	200.....	14.3%
Senate District L.....	100.....	7.1%

THE FOLLOWING VARIABLE WAS CALCULATED FROM THE GENDER AND MARITAL STATUS VARIABLES:

	FREQUENCY	PERCENT
Married Males.....	552.....	39.4%
Married Females.....	528.....	37.7%
Single Males.....	148.....	10.6%
Single Females.....	172.....	12.3%

THE FOLLOWING VARIABLE WAS CALCULATED FROM THE AGE, MARITAL STATUS AND CHILDREN VARIABLES:

	FREQUENCY	PERCENT
Young Singles.....	73.....	5.2%
Adult Singles.....	167.....	11.9%
Single Parent.....	80.....	5.7%
Young Couple.....	71.....	5.1%
Mature Couples.....	454.....	32.4%
Young Family.....	261.....	18.7%
Mature Family.....	292.....	20.9%

CROSSTABULATION TABLES