

ALASKA LEGISLATURE SPECIAL COMMITTEE/SUBJECT FILES 8672
2663 SCOMM 120 HOUSE SPEC.COMM. UTILITY RESTRUCTURING, 1999-2000



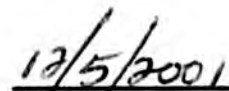
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SCOMM 120: HOUSE SPECIAL COMMITTEE ON UTILITY RESTRUCTURING,
1999-2000

MEMBERS:

REPRESENTATIVE BILL HUDSON, CHAIR
REPRESENTATIVE JOHN COWDERY, VICE CHAIR
REPRESENTATIVE ETHAN BERKOWITZ
REPRESENTATIVE JOHN DAVIES
REPRESENTATIVE JOE GREEN (ALTERNATE)
REPRESENTATIVE PETE KOTT
REPRESENTATIVE NORMAN ROKEBERG
REPRESENTATIVE BRIAN PORTER

Established by House Resolve No. 6, 1999.

Contents: 16 files. 32 cassettes are also available of meetings held 2/3/99 - 4/12/00.

LIST OF FILES (PAGE 1)

MICROFICHE #

1999:

1. OVERVIEW: UTILITY RESTRUCTURING (URS), 2/3/99
2. PRESENTATION: PILOT STUDY BY CH2M HILL, HB 101, 3/3/99
3. PRESENTATION: CH2M HILL FINAL REPORT BY KARL RABAGO, 4/14/99 (SEE FILE #4)
4. "REPORT TO: THE ALASKA PUBLIC UTILITIES COMMISSION AND THE ALASKA STATE LEGISLATURE: STUDY OF ELECTRIC UTILITY RESTRUCTURING IN ALASKA" BY CH2M HILL, APRIL 1, 1999 (COVER SAYS: "REPORT TO: LEGISLATIVE JOINT COMMITTEE ON ELECTRIC RESTRUCTURING AND THE ALASKA PUBLIC UTILITIES COMMISSION")
5. "REPORT ON THE ALASKA PUBLIC UTILITIES COMMISSION" BY NATIONAL REGULATORY RESEARCH INSTITUTE, OCTOBER 1998
6. HB 81
7. HB 183/SB 133
8. HB 185
9. HCR 10

SCOMM 120: HOUSE SPECIAL COMMITTEE ON UTILITY RESTRUCTURING,
1999-2000

LIST OF FILES (PAGE 2)

MICROFICHE #

2000:

10. ENERGY ALTERNATIVES, 3/8/00
11. POWER COST EQUALIZATION (PCE), 2/9 & 3/29/00
12. REGULATORY COMMISSION ON ALASKA (RCA), 1/26/00
13. TELECOMMUNICATIONS STATUS IN ALASKA, 4/5/00
14. HB 169
15. HB 248
16. HB 323

SCOMM

120:1



Alaska State Legislature

Representative Bill Hudson

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Juneau, Alaska
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Committees:

Chair
Fisheries
Utilities
Restructuring

Member
Transportation
State Affairs

AGENDA UTILITY RESTRUCTURING COMMITTEE

Wednesday February 3, 1999 @ 8AM in room # 120

Representative Bill Hudson-Chair, John Cowdery- Vice Chair, Pete Kott, Norman Rokeberg, Brian Porter, John Davies and Ethan Berkowitz, Joe Green-alternate

ORGANIZATIONAL MEETING

- 1. Introductions of committee members.**
- 2. Issue: Is utility restructuring and utility competition a good idea for Alaska. Chair Hudson**
- 3. Interim Committee report, and overview of pilot program contract with CH2Mhill, by Rep. Chairman Rokeberg**
- 4. Interim Committee report by Sen. Loren Leman**
- 5. Interim Committee report by Rep. John Davies**
- 6. Alaska Rural Electric Co-op overview-Eric Yould, Exec Director**
- 7. Committee discussion**

If you have any question please call me, or Committee Aide Walter Wilcox Sr.

Alaska State Legislature

Representative Bill Hudson



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- 1. Call to order**
- 2. Role call- quorum**
- 3. Purpose of this meeting**
 - A. Identify ourselves**
 - B. Provide basic transition from the Interim Committee to ourselves**
 - C. Begin basic study of subject matter**
 - D. Introduce staff**
 - E. Scope of committee**
 - i.e.: electric utility**
 - Telecommunications**
 - Other utilities as indicated**
- 4. Start per agenda**
 - a. Loren**
 - b. Norman**
 - c. John**
- 5. Discussion**

**Recommendations
to the
Alaska State Legislature
and the
Alaska Public Utilities Commission
Regarding a Retail Pilot Program**

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March 1, 1999

Table of Contents

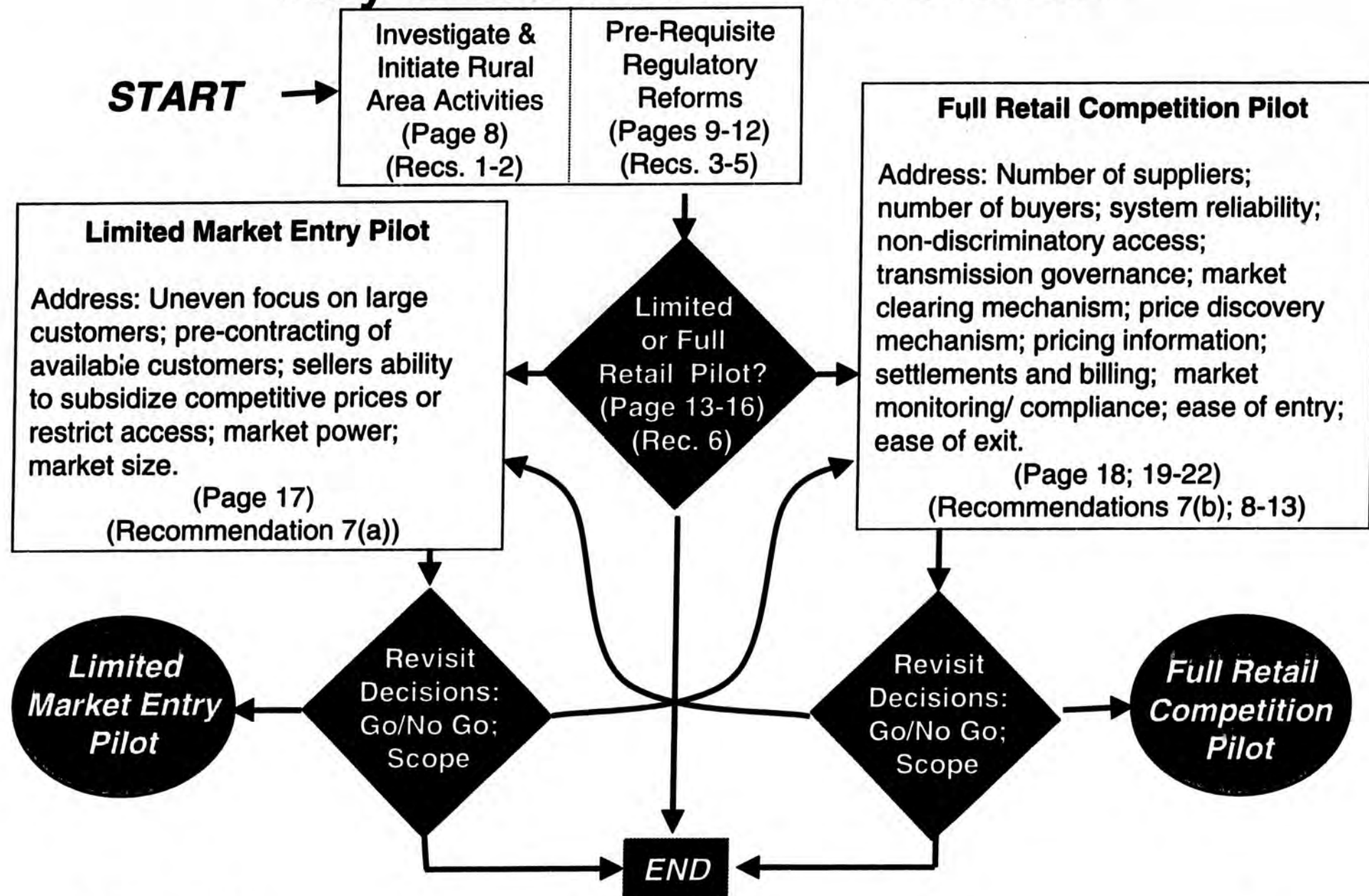
Objective: Maximizing the Opportunities for Learning and Competition	3
Key Decisions in the Process	4
Process for Informing Public Policy Decisions.....	5
Competition - What Do You Need to Know?	6
Rural Areas Offer New Opportunities.....	8
Current System Has Inefficiencies	9
No-Regrets Agenda Reveals Competitive Opportunities.....	10
Clearing the Way for the Fundamental Question	12
Pilot Program Design - The Key Decision.....	13
Deciding the Scope of the Pilot.....	14
Pilot Complexity Dictates Cost & Effort and Learning Opportunities	16
Implementing a Limited Market Entry Pilot.....	17
Implementing a Full Retail Competition Pilot	18
Identify Most Promising Areas for Benefits.....	19
Identify Barriers to a Competitive Pilot	20
Innovative Solutions to Market Barriers	21
Study and Models Can Inform Most Issues	22
Comparison of Pilot Characteristics	23
Summary of Recommendations	26
Recommended Legislative Positions.....	31

Objective: Maximizing the Opportunities for Learning and Competition

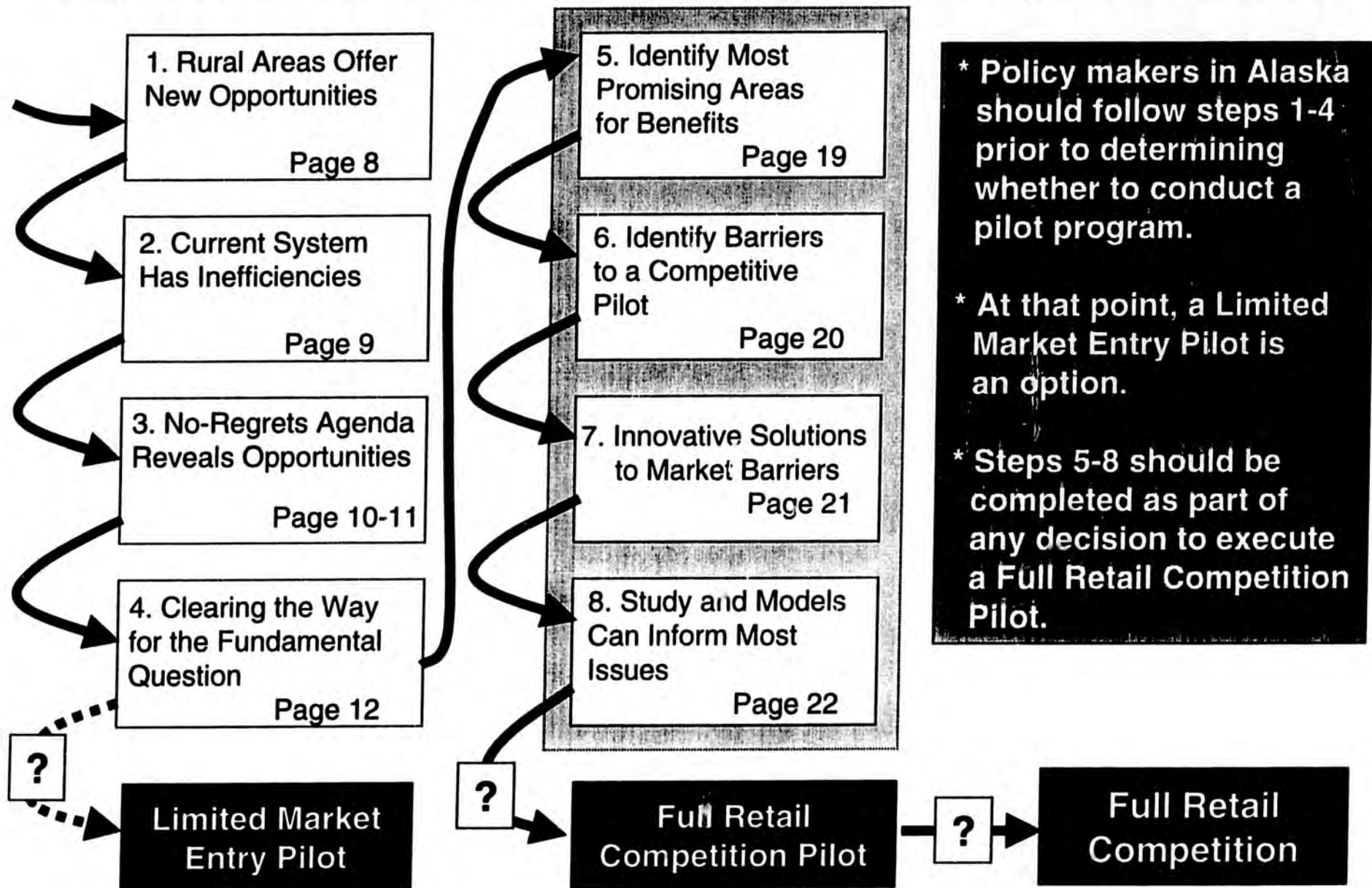
To provide recommendations to the Alaska Public Utilities Commission and the Alaska State Legislature on the scope, character, and structure of a pilot program:

- To support and inform public policy decisions regarding restructuring the electric power industry.
- To most effectively use regulatory reforms and competitive market forces to reveal and deliver cost savings to Alaska electricity customers.
- To apply the lessons learned from other jurisdictions and industries to the unique characteristics of the electricity industry in Alaska.
- To recommend two distinct, but not mutually exclusive, pathways to discover and to learn about competitive markets.

Key Decisions in the Process



Process for Informing Public Policy Decisions



Competition - What Do You Need to Know?

- What are the minimum number of sellers to ensure a liquid supply market and effectively mitigate market power and market collusion?
- What are the minimum number of buyers to ensure demand responsiveness (demand elasticity and diversity)?
- How do you structure and manage the transmission system to ensure system reliability and stability?
- How do you structure and manage the transmission and distribution system to ensure non-discriminatory access to all facilities?
- How do you structure and manage the transmission system to balance system reliability and nondiscriminatory access?
- How can you provide a robust, competitive and credible marketplace where utilities, power marketers, load aggregators, cogenerators and large customers can do business quickly and easily?
- How do you establish an electronic auction mechanism to accept supply and demand bids to determine a market clearing price for each of the 24 periods in the trading day?

Competition - What Do You Need to Know?

- How do you provide real time information to all market participants and interested parties about trading volumes and market clearing prices over the course of a trading day?
- What is the most cost effective way to coordinate scheduling and arrange delivery of power, and to provide transactions settlement and billing services to buyers and sellers?
- Who has the responsibility for monitoring the activities of market participants to detect practices or behaviors that indicate that the markets are being manipulated to the detriment of their fairness or efficiency?
- Under what circumstances will current ownership of generating resources be maintained, or required to be sold to affiliate companies or new market entrants?
- What analytic methodology should be used to calculate and allocate stranded costs?

Rural Areas Offer New Opportunities

- A policy that makes sense for ALL of Alaska must address the rural areas.
- An important objective is to improve resilience to Power Cost Equalization challenges.
- Several promising and isolated projects are currently underway, but have not appeared on the regulatory agenda.
- Recommendation 1: Continue and expand efforts to improve rural system efficiencies through aggregation of administrative, fuel-purchasing, operations, logistical and other appropriate functions among geographically separate but proximate villages.
- Recommendation 2: In order to build practical experience in the use and deployment of distributed energy systems which offer potential long-term cost savings, consider the creation of a pilot program based on technology demonstration and deployment, conducted in coordination with government and non-governmental organizations.

Current System Has Inefficiencies

- Structural inefficiencies exist in wholesale, transmission, and retail services - largely as a result of history.
- Most of this inefficiency remains because Alaska has not yet applied the market-informed learning of other jurisdictions to its electricity system.
- Aurora Power Resources, Inc.'s (Aurora) proposal demonstrates that inefficiencies are large enough to motivate a profit-making company.
- Policy Question: Are the opportunities created by current structural inefficiencies most effectively addressed through regulatory reform or by introduction of competitively motivated 3d party intermediaries.
- Recommendation 3: Permitting 3d party intermediaries to pursue economic opportunities created by structural inefficiencies does not necessarily prove the benefits of competition. Initiate a specific set of market-friendly regulatory reforms today in order to bring the real competitive opportunity into focus.

No-Regrets Agenda Reveals Competitive Opportunities

- Market thinking in other states and industries, and the October 1998 Black & Veatch Study, have revealed new tools for improving efficiency, which can be implemented through a more aggressive regulatory agenda.
- Absent positive action today, market and structural uncertainties dissuade many potential competitors.
- Regulatory reforms form a foundation for competitive regimes; by removing inefficiencies and defining market rules, they allow focus on competitive opportunities.

No-Regrets Agenda Reveals Competitive Opportunities (cont'd.)

Recommendation 4: Complete a regulatory agenda that -

- (a) calculates and allocates component costs for Railbelt utilities in a rational and uniform manner (unbundling and cost allocation);
- (b) rationalizes access to, and governance of, the transmission system to create a non-discriminatory open access network while ensuring reliability;
- (c) rationalizes oversight of generation siting and construction to minimize stranded cost exposure and to foster the emergence of a competitive wholesale market with new merchant generators; and
- (d) implements central dispatch/power pooling recommendations of the October 1998 Black & Veatch Study in the Railbelt to harvest near-term savings and to facilitate emergence of a competitive wholesale market over the longer term.

Clearing the Way for the Fundamental Question

- Regulatory reforms allow assessment of the magnitude of the residual market inefficiencies.
- Regulatory reforms reveal savings and/or other public policy goals and objectives. These, in turn, establish the economic and policy justifications for a pilot program and/or the implementation of retail competition.
- The Fundamental Question:

Can retail competition produce savings or benefits beyond those from improved regulation?

- Recommendation 5: Don't ask the fundamental question until you are ready to answer it. Then, decide what kind of pilot to conduct.

Pilot Program Design - The Key Decision

- The primary value of a pilot program is to learn about and gain practical experience with selected elements of a more open and competitive industry environment.
- Careful focus on which elements to test informs both design of the pilot and criteria for performance measurement.
- By revealing what kind of competitive system is reasonably obtainable, a well-designed pilot program can inform critical public policy decisions.
- In essence, pilot program design and implementation should reflect learning objectives.
- Recommendation 6: Carefully review the elements of competitive markets and craft a pilot which demonstrates/tests the desired model of competition.

Deciding the Scope of the Pilot

	ELEMENT	CRITICAL QUESTION	IS THIS ADDRESSED IN THE PROPOSED AURORA PILOT?	IS THIS ADDRESSED IN THE PROPOSED CHUGACH PILOT?	CAN THIS BE ADDRESSED IN A MORE COMPREHENSIVE PILOT DESIGN?
1	Number of Suppliers	What are the minimum number of sellers to ensure a liquid supply market and effectively mitigate price fixing and market collusion?	No	No	Yes
2	Number of Buyers	What are the minimum number of buyers to ensure demand responsiveness (demand elasticity and diversity)?	No	No	Yes
3	System Reliability	How do you structure and manage the transmission system to ensure system reliability and stability?	No	No	Yes
4	Non-discriminatory Access	How do you structure and manage the transmission and distribution system to ensure non-discriminatory access to all facilities?	No	No	Yes
5	Transmission Governance	How do you structure and manage the transmission system to balance reliability and nondiscriminatory access?	No	No	Yes
6	Market Clearing Mechanism	How can you provide a robust, competitive and credible marketplace where utilities, power marketers, load aggregators, cogenerators and large customers can do business quickly and easily?	No	No	Yes

Deciding the Scope of the Pilot (cont'd.)

	ELEMENT	CRITICAL QUESTION	IS THIS ADDRESSED IN THE PROPOSED AURORA PILOT?	IS THIS ADDRESSED IN THE PROPOSED CHUGACH PILOT?	CAN THIS BE ADDRESSED IN A MORE COMPREHENSIVE PILOT DESIGN?
7	Price Discovery Mechanism	How do you establish an electronic auction mechanism to accept supply and demand bids to determine a market clearing price for each of the 24 periods in the trading day?	No	No	Yes
8	Pricing Information	How do you provide real time information to all market participants and interested parties about trading volumes and market clearing prices over the course of a trading day?	No	No	Yes
9	Settlements and Billing	What is the most cost effective way to coordinate scheduling and arrange delivery of power, and to provide transactions settlement and billing services to buyers and sellers?	No	No	Yes
10	Market Monitoring and Compliance	Who has the responsibility for monitoring the activities of market participants to detect practices or behaviors that indicate that the markets are being manipulated to the detriment of their fairness or efficiency?	No	No	Yes
11	Ease of Entry	Under what circumstances will current ownership of generating resources be maintained, or required to be sold to affiliate companies or new market entrants?	No	No	Yes
12	Ease of Exit	How do you calculate and allocate stranded costs?	No	No	Yes

Pilot Complexity Dictates Cost & Effort and Learning Opportunities

**Limited Market
Entry Pilot**

**Full Retail
Competition Pilot**

Cost & Effort



What You Learn:

1. Customers accept/
seek price discounts
2. Diffusion rate of
Customer Awareness
- 3 Impacts associated
with loss of customers
4. Competitive tactics

What You Learn:

1. No. of suppliers
2. No. of buyers
3. Reliability impacts
4. Openness of access
5. Trans. Governance
6. Market clearing
mechanism
7. Price discovery
mechanism
8. Information
dissemination
9. Settlements &
billing
10. Market policing
11. Ease of entry/exit,
Plus - lessons from
Limited Market
Entry pilot

Implementing a Limited Market Entry Pilot

Problem:	Recommendation 7(a):
Uneven focus on large customers	Match customer participation in proportion to current rate class percentages (by kWh)
Pre-contracting limits pool of available customers	Fresh start for all eligible customers, with cooling off period
Sellers may subsidize competitive prices from captive customers	All sellers must satisfy APUC that captive customers are held harmless
Sellers may leverage incumbency to restrict access or gain competitive advantage	APUC ensures captive customers held harmless and equal access to customer information
Exercise of market power	Require generating resources used in pilot program to be removed from ratebase
Market size too small to support competition	Increase contestible market size; change trading unit; and/or cap market shares

Implementing a Full Retail Competition Pilot

Element:	Recommendation 7(b):
Number of Suppliers	Use computer models to assess market power
Number of Buyers	Use computer models to assess demand responsiveness
System Reliability	Study transmission reliability issues and recommend operating criteria
Non-discriminatory Access	Design rules and protocols for open access
Transmission Governance	Establish governing principals and draft bylaws
Market Clearing Mechanism	Design and implement power exchange
Price Discovery Mechanism	Design software for aggregating all valid supply bids and demand bids to determine market clearing price
Pricing Information	Design internet-based real-time information system
Settlements and Billing	Design customer information and billing systems
Market Monitoring and Compliance	Establish rules and protocols to coordinate scheduling and arrange delivery of power, and settle all transactions
Ease of Entry	Study and design rules and procedures for divestiture of generating assets
Ease of Exit	Determine analytic methodology and allocation formulas for possible stranded investment

Identify Most Promising Areas for Benefits

- Experience in other industries and locations demonstrates that market benefits exceed expectations when markets are properly structured.
- Recommendation 8: Maximize potential for market success -

What?	Why?
Mitigate regulatory and structural inefficiencies	To produce near-term savings and encourage efficient market behavior
Design pilot and retail competition to encourage technology-based competition	To realize the potential for technological innovation to reduce costs
Design efficient commodity markets	To enable value-added service innovation
Exploit Alaska's small electricity systems	To lead the industry trend toward new, modular distributed energy systems
Harmonize restructuring agendas in telecommunications, natural gas, and electricity	To realize convergence benefits

Identify Barriers to a Competitive Pilot

- What are the costs associated with piloting competition?
- To what extent are the costs indifferent to the size of the pilot?
- To what extent should these cost considerations drive a decision to bypass a pilot and move directly to full retail competition?
- Recommendation 9: Any market, regardless of size and scope, must carry its own administration and oversight costs.

Innovative Solutions to Market Barriers

- Number and/or diversity of suppliers may be insufficient to prevent exercise of market power.
- Number and/or diversity of buyers may be insufficient to produce robust demand responsiveness.
- Market for electricity may be too illiquid to support secondary markets.
- Recommendation 10: Consider contract-based competition in small increments of energy, e.g., 500 kWh contracts, to increase market liquidity.
- Recommendation 11: Consider a BTU Exchange, e.g., create a market exchange where both gas and electricity are traded as BTU contracts, to increase market liquidity.

Study and Models Can Inform Most Issues

- Most structural and operational issues associated with a full retail competition pilot and competitive markets can be studied using sophisticated market simulation models.
- The goal of modeling is to determine whether viable retail competition is reasonably obtainable.
- Recommendation 12: Commission retail market simulation modeling as part of the decision to move to a full retail competition pilot.
- Recommendation 13: Full retail market opening must be preceded by modeling and simulation in any case.

Comparison of Pilot Characteristics

	Limited Market Entry Pilot	Full Retail Market Pilot
Description	Implements regulatory reforms; introduces limited market forces	Implements regulatory reforms; studies and learns about the scope, character and structure of competitive power markets in the unique context of Alaska.
Goal	Optimizes and updates the status quo; most direct path to limited customer choice	Provides the necessary information and insights to the Alaska State Legislature and the APUC to make the decision whether to implement full retail competition.
Drivers	Any retail market experience creates an opportunity to discover benefits of competitive forces in electricity markets	Retail competition pilots should be preceded by careful study, and should serve as a means to explore the contours of a more competitive electricity market.

Comparison of Pilot Characteristics (cont'd.)

	Limited Market Entry Pilot	Full Retail Market Pilot
Rural Areas	Offers new opportunities to improve rural system efficiencies; takes leadership position in development of distributed energy systems through a technology-based competitive pilot	Offers new opportunities to improve rural system efficiencies; takes leadership position in development of distributed energy systems through a technology-based competitive pilot
Biggest Risk	Exercise of market power	Lost opportunities in near-term; sufficiently liquid market for competition may not develop
Regulatory Role	Addresses and removes regulatory inefficiencies; comprehensive oversight and management for public benefit	Addresses and removes regulatory inefficiencies; reveals barriers to competitive markets; studies and designs structures and rules to ensure that markets are structured to operate efficiently and equitably
Legislative Role	Provides public policy direction; clarifies APUC jurisdiction in several important areas	Establishes public policy goals and objectives regarding electric industry restructuring; provides APUC with broader authority and jurisdiction as necessary; appropriates additional funds as required

Comparison of Pilot Characteristics (cont'd.)

	Limited Market Entry Pilot	Full Retail Market Pilot
Market Operation	Collaboration and limited competition among incumbent utilities	Functionally or structurally separated generation dispatch and transmission system operations, perhaps under new independent governing organizations
Wholesale Market	Limited number of players; competition primarily among 3rd party intermediaries	More robust and transparent; partially segmented according to new retail market demands
Retail Market	Very limited choices -- price and maybe green	Burgeoning array of novel energy products and services
New Entrants	Exclusive and traditional group; narrow play in quiet market	Broad range of companies from non-utility industries team and compete to establish novel products and services in wide open new markets

Summary of Recommendations

1. Continue and expand efforts to improve rural system efficiencies through aggregation of administrative, fuel-purchasing, operations, logistical and other appropriate functions among geographically separate but proximate villages.
2. In order to build practical experience in the use and deployment of distributed energy systems which offer potential long-term cost savings, consider the creation of a pilot program based on technology demonstration and deployment, conducted in coordination with government and non-governmental organizations.
3. Permitting 3rd party intermediaries to pursue economic opportunities created by structural inefficiencies does not necessarily prove the benefits of competition. Initiate a specific set of market-friendly regulatory reforms today in order to bring the real competitive opportunity into focus.

Summary of Recommendations (cont'd.)

4. Complete a regulatory agenda that -
 - (a) calculates and allocates component costs for Railbelt utilities in a rational and uniform manner (unbundling and cost allocation);
 - (b) rationalizes access to, and governance of, the transmission system to create a non-discriminatory open access network while ensuring reliability;
 - (c) rationalizes oversight of generation siting and construction to minimize stranded cost exposure and to foster the emergence of a competitive wholesale market with new merchant generators; and
 - (d) implements central dispatch/power pooling recommendations of the October 1998 Black & Veatch study in the Railbelt to harvest near-term savings and to facilitate emergence of a competitive wholesale market over the longer term.

Summary of Recommendations (cont'd.)

5. Don't ask the fundamental question - "Can retail competition produce savings or benefits beyond those from improved regulation?" - until you are ready to answer it. Then, decide what kind of pilot to conduct.
6. Carefully review the elements of competitive markets and craft a pilot which demonstrates/tests the desired model of competition.
7. Execute recommendations specific to implementation of (a) Limited Market Entry Pilot and/or (b) Full Retail Competition Pilot, as appropriate.

Summary of Recommendations (cont'd.)

8. Maximize potential for market success -
 - (a) Mitigate regulatory and structural inefficiencies to produce near-term savings and encourage efficient market behavior.
 - (b) Design pilot and retail competition to encourage technology- based competition and to realize the potential for technological innovation to reduce costs.
 - (c) Design efficient commodity markets to enable value-added service innovation.
 - (d) Exploit Alaska's small electricity systems to lead the industry trend toward new, modular distributed energy systems.
 - (e) Harmonize restructuring agendas in telecommunications, natural gas, and electricity to realize convergence benefits.

Summary of Recommendations (cont'd.)

9. Any market, regardless of size and scope, must carry its own administrative and oversight costs.
10. To increase market liquidity, consider contract-based competition in small increments of energy, e.g., 500 kWh contracts.
11. To increase market liquidity, consider a BTU Exchange, e.g., create a market exchange where both gas and electricity are traded as BTU contract.
12. Commission retail market simulation modeling as part of the decision to move to a full retail competition pilot.
13. Full retail market opening must be preceded by modeling and simulation in any case.

Recommended Legislative Positions - Rural

- The Alaska Legislature supports the application of innovative ideas and programs to increase the value and decrease the costs of electricity services in rural Alaska, and encourages the Alaska Public Utility Commission (APUC), working with other governmental and non-governmental organizations, to craft and conduct programs to:
 - improve rural system efficiencies through aggregation of administrative, fuel-purchasing, operations, logistical and other appropriate functions among geographically separate but proximate villages,
 - build practical experience in the use and deployment of distributed energy systems, which offer potential long-term cost savings, through a pilot program based on technology demonstration and deployment, and
 - develop and execute other appropriate pilot activities in rural Alaska.
- The Alaska Legislature finds that the APUC's current statutory authority is sufficient to conduct such activities.

Recommended Legislative Positions - Railbelt

- The Alaska Legislature supports the conduct of a retail electricity pilot program to explore the potential for improved electric services and reduced costs in a more competitive, market oriented electricity services environment.
- The Alaska Legislature finds that, while the implementation of full retail competition in the electricity sector merits the passage of specific enabling legislation, the APUC currently enjoys sufficient statutory authority to implement such a pilot program, including:
 - making provisions for streamlined registration and oversight mechanisms for pilot program participants under Alaska Statutes Title 42, Chapter 05 (including, specifically, AS §§ 42.05.141, .221, .241, and .431); and
 - imposing such other structural and administrative requirements upon pilot program participants as may be appropriate to protect the public interest and advance the purposes of the pilot program.

Recommended Legislative Positions

- Railbelt (cont'd.)

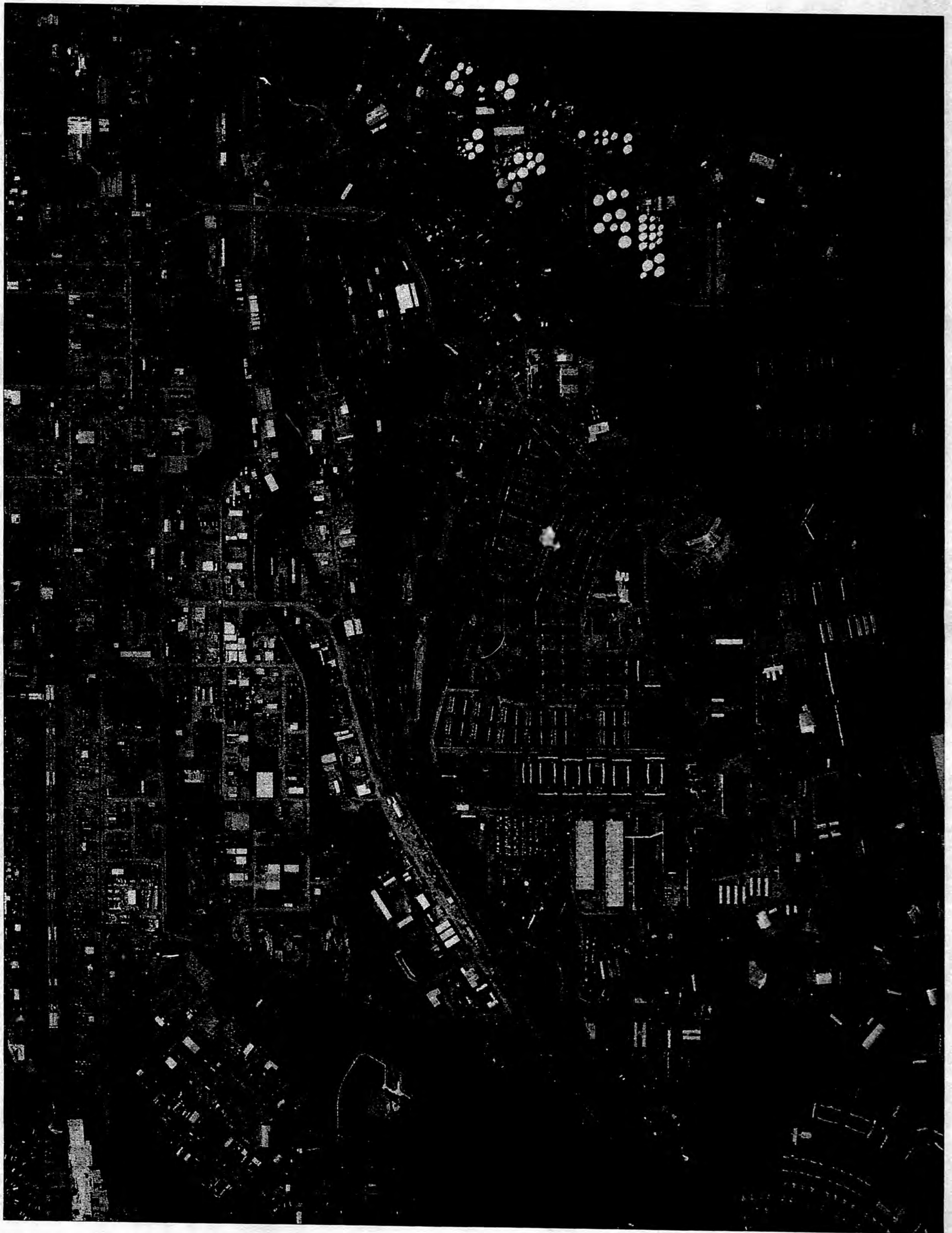
- The Alaska Legislature concludes that prior to the opening of any retail electricity pilot program, and no later than July 1, 2000, the APUC must complete a regulatory agenda that:
 - calculates and allocates component costs for Railbelt utilities in a rational and uniform manner (unbundling and cost allocation);
 - rationalizes access to, and governance of, the transmission system to create a non-discriminatory open access network while ensuring reliability;
 - rationalizes oversight of generation siting and construction to minimize stranded cost exposure and to foster the emergence of a competitive wholesale market with new merchant generators; and
 - implements central dispatch/power pooling recommendations of the October 1998 Black & Veatch study in the Railbelt to harvest near-term savings and to facilitate emergence of a competitive wholesale market over the longer term.

Recommended Legislative Positions

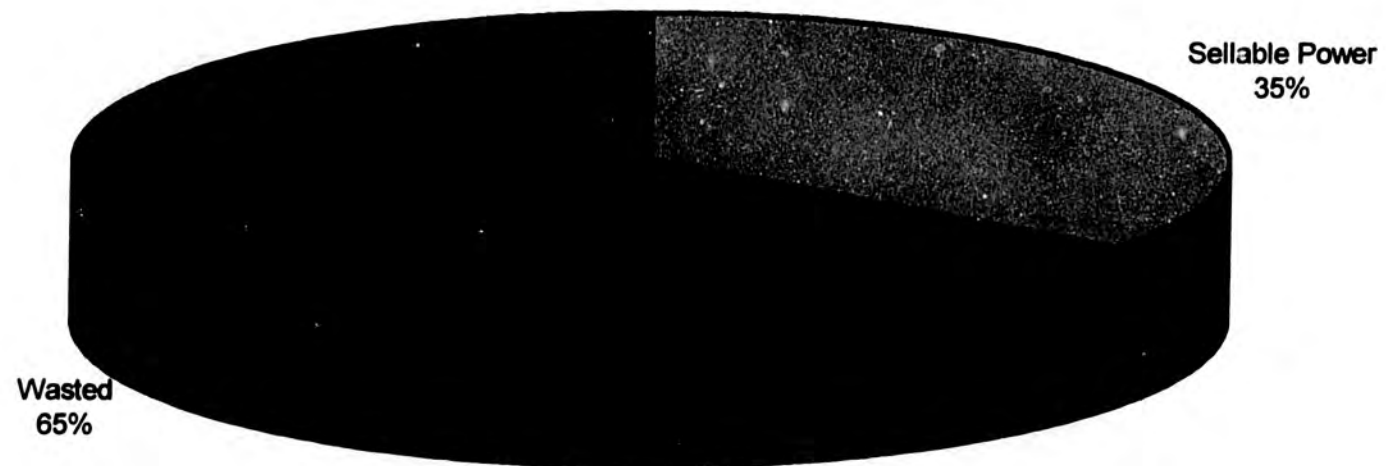
- Railbelt (cont'd.)

- The Alaska Legislature concludes that, prior to the opening of any retail electricity pilot program, the APUC should ensure that the design and execution of such a program addresses a full range of competitive market issues, including, but not limited to:
 - number of suppliers,
 - number of buyers,
 - system reliability,
 - non-discriminatory access,
 - transmission governance,
 - market clearing mechanism,
 - price discovery mechanism,
 - price discovery mechanism,
 - pricing information,
 - settlements and billing,
 - market monitoring/ compliance,
 - ease of entry, and
 - ease of exit.

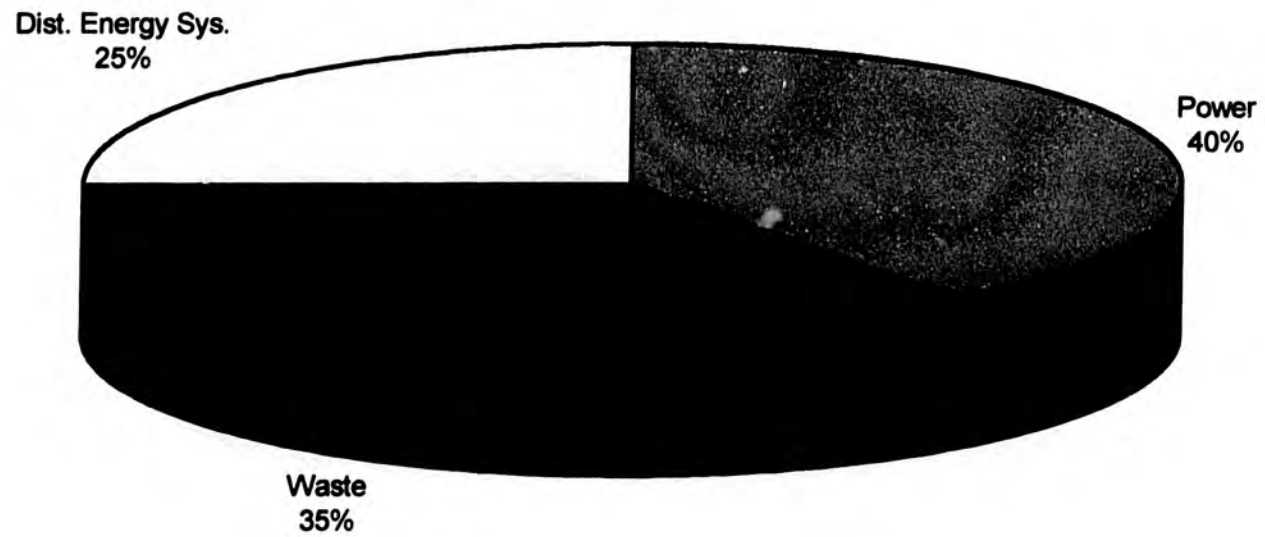
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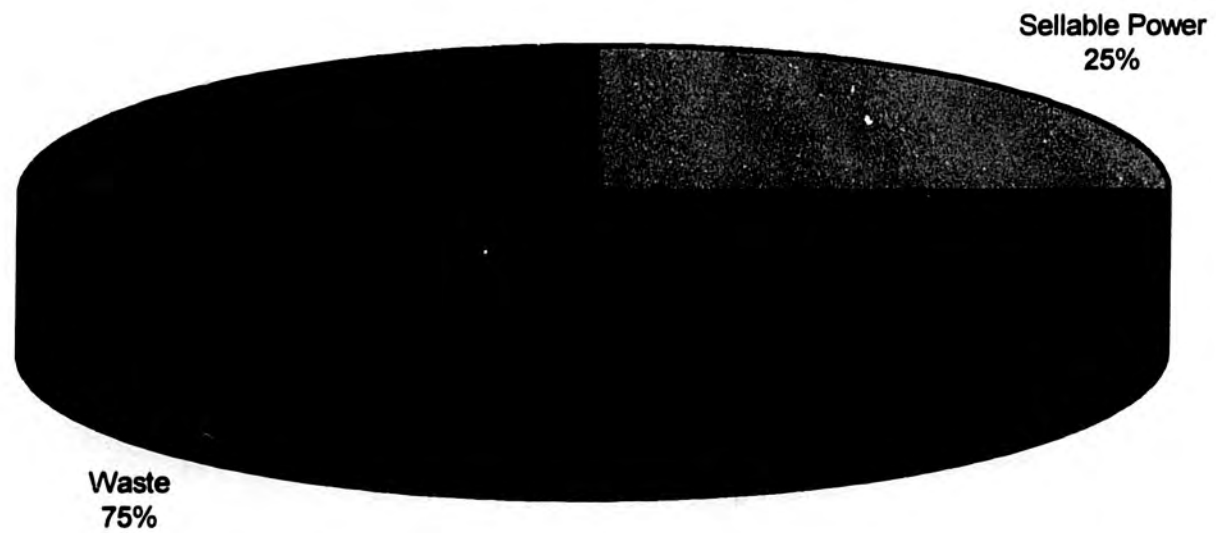
CEA and ML&P's Best Performance



Knik Arm Power Plant



CEA's Units 3 & 5 at Beluga



Guidelines Suggested by
Joint Committee on Electric Utilities Restructuring
for a Study
On Electric Utility Restructuring in Alaska

Note: This information is given as background information to the RFP and is for informational purposes only. This document is not part of the scope of work.

Background of Consultant:

Extensive experience with electric utility restructuring (international, national or state)
Engineering and economic capability
Balanced on issue of electric utility restructuring
Availability during study and reporting period
If not an Alaskan business, willing to partner with Alaskan businesses
Licensed to do business in Alaska

Scope of Study:

The main question to be addressed is the risk/reward and cost/benefit of wholesale and/or retail competition in the electric utility industry in Alaska. Initial emphasis of resources should be on the Alaska Railbelt.

Issues/Scenarios to be Addressed:

ALASKA

- Assess Alaska's unique situation regarding transmission grid.
- Assess competition potential on wholesale and retail level.
- Review nature of ownership of Alaska utilities with the public owning nearly all of the utilities either on a cooperative member basis or a municipally-owned basis - and its impact on restructuring.
- From restructuring experience in other jurisdictions, assess possible results of restructuring in Alaska.
- 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 State's exposure on Four-Dam Pool and other power generation and transmission lines, and contractual obligations State has to these projects.

STRANDED INVESTMENTS

- Identify investments that may be stranded by competition and how these costs should be recovered.
- Assess impact of State's ownership and financing of major transmission facilities and whether that ownership and financing impacts possible stranded investments.
- Assess the impacts on existing gas supply contracts and wholesale power contracts in a competitive wholesale market.

RELIABILITY/SAFETY

- Assess how to preserve reliability and safety under competition scenarios.
- Assess handling of peak loads (particularly in the winter) and how these loads would be serviced under competition.
- Assess spinning reserves and standby capacities in current and any restructured system.

AFFORDABILITY

- Assess low-income protection, universal service provisions, including provider of last resort, obligation to serve, and how these should be structured; e.g., telecommunications within Alaska is required to provide universal service.
- Define and assess potential problems related to cherry picking.
- Assess potential for mergers and acquisitions, and consolidation of various market segments (winding up with one major player in the area).

PILOT PROGRAM

- Assess whether one would work in Alaska, or in specific areas of Alaska.
- Suggest structure for acquisition of meaningful data.

CONSUMER EDUCATION

- Assess the issue of how to educate consumers under any restructuring plan and the anticipated cost of such a program.

FINANCIAL ISSUES

- Bonds: Assess any potential restructuring problems with tax-free and municipal bonds and/or outstanding federal loans.
- Taxes: Assess tax implications facing local and/or state government.
- Costs to government: Assess anticipated costs of instituting restructuring on state and local governments.
- Consumers: Assess potential bottom line for consumers, what percent of eventual savings to consumers will result from each of the options.
- Wholesale contracts: Assess how to deal with current long-term power purchase contracts; identify measures to ensure a level playing field.
- Reliability: Assess cost of maintaining spinning reserves and standby capacity and how payment for these systems should be addressed.
- Stability: Assess potential and impact of power suppliers/brokers financial insolvency or quitting the marketplace.

ALASKA LEGISLATURE

- Outline policy issues, possible statutory changes the Legislature may need to address.

ALASKA PUBLIC UTILITIES COMMISSION (APUC)

- Assess role of APUC in restructuring.
- Outline what regulatory measures the agency may need to address (e.g., transitional issues)

- Assess whether statutory changes are required to provide oversight of market players, i.e., currently power marketers may not be required to be certificated or registered with the APUC.

OTHER

- Incorporate, but not duplicate the work products from APUC Docket U-97-140, specifically the Black & Veatch study.
- When reviewing the existing system, consider that more than one competition scheme may be appropriate within the entire state.
- Look at whether or not the existing regulatory scheme is adequate to address any suggested direction for each market segment; if inadequate, identify regulatory oversight needed after restructuring.
- Look at how to make performance-based regulations.
- For each scenario assess the impact new technology has had, does have and could have on electrical systems.
- Discuss implied vs. explicit ratepayer subsidies: What are they? How are they impacted by restructuring?

REPORT AND RECOMMENDATIONS

ON

ELECTRIC UTILITY RESTRUCTURING

From

Joint Committee on Electric Utility Restructuring

19 January 1999

TABLE OF CONTENTS

Introduction.....	1
Overview.....	2
Joint Committee Membership and Meetings.....	2
Issues and Discussion.....	3
Alaska Structure of Electrical Utilities.....	8
Issues of Concern.....	10
Customer Choice and Sustained Competition.....	11
“Cherry-picking” and Cost Shifting.....	12
Consumer Protection.....	13
Universal Service.....	13
Power Pooling.....	14
Stranded Costs.....	14
Reliability/Safety.....	15
Four-Dam Pool and other State-Owned Facilities.....	15
Statutory Guidance to the Alaska Public	
Utilities Commission.....	15
Green Power.....	16
Pilot Program.....	17
Study of Electric Utility Restructuring in Alaska.....	18
Findings and Conclusions on Electric Utility Restructuring.....	19
Recommendations.....	21
Appendix.....	22
Persons Testifying at Various Meetings.....	23
Persons Submitting Written Testimony.....	24
Member Comments.....	26
Exhibits.....	29
Exhibit A – April 30, 1997 letter from Department of Law,	
Office of the Attorney General, to Representatives	
Rokeberg and Sanders	
Exhibit B – October 9, 1997 memorandum from United	
State Senator Frank Murkowski, Chairman, Committee	
On Energy and Natural Resources, to Committee	
Members	
Exhibit C – CSHCR 34 (L&C) am	

Introduction

The Joint Committee on Electric Utility Restructuring was formed under House Concurrent Resolution 34. The Committee's pertinent task was to "provide to the legislature written recommendations on whether and how to implement electric utility restructuring in Alaska."

Committee members met and reviewed testimony (oral and written) from industry representatives, a consumer advocacy group, and concerned Alaskans and worked with the Alaska Public Utilities Commission to address the major issues concerning any plan for electric utility restructuring. The Joint Committee, unfortunately, did not hear from many residential consumers and is concerned about this lack of testimony from this area. Despite the best efforts of the Joint Committee Chairmen to provide public notice and encourage testimony, the residential consumer was not well represented in this process.

Contained in this Report and Recommendation are: (1) an overview of the committee's work and (2) our recommendations to the 21st Alaska Legislature concerning electric utility restructuring.

The backup documentation and files for the Joint Committee have been forwarded to the Legislative Reference Library for processing and storage. Those wishing to do further research regarding the Joint Committee's efforts may access files through that entity. The minutes from meetings held by the Joint Committee are available through the Legislature's WEB site (<http://www.legis.state.ak.us>).

The Co-Chairmen thank the committee members and the interested Alaskans who took the time to participate in the hearings. We also express our appreciation to APUC Chairman Commissioner Sam Cotten, Commissioner Dwight Ormquist, Commissioner Jim Posey and APUC staff members Bob Lohr and Paul Morrison who worked with the committee.

Senator Bert Sharp
Co-Chairman

Representative Norman Rokeberg
Co-Chairman

Joint Committee on Electric Utility Restructuring

JOINT COMMITTEE ON ELECTRIC UTILITY RESTRUCTURING MEMBERS

Senator Bert Sharp
Co-Chairman

Representative Norman Rokeberg
Co-Chairman

Senator Loren Leman
Senator Robin Taylor
Senator Al Adams

Representative Alan Austerman
Representative Fred Dyson
Representative John Davies

Committee Staff:
Committee Secretary:

Janet S. Seitz
Dianna Pree

MEETINGS

August 6, 1998
August 18, 1998
September 4, 1998
September 16, 1998
November 18, 1998
January 6, 1999
January 18, 1999

Anchorage
Anchorage
Anchorage (Subcommittee Meeting)
Fairbanks*
Anchorage
Anchorage
Juneau**

*The committee hearings were all recorded with the exception of the September 16th meeting in Fairbanks. The tape recorder malfunctioned at this meeting.

Teleconference sites on line for most hearings: Fairbanks, Juneau, Kenai, Matanuska-Susitna, Kodiak, Barrow (for September 16th hearing).

**Teleconference from Juneau to Anchorage and Fairbanks

ISSUES

Should Alaska permit competition among electric utilities? If so, how should such competition be structured?

DISCUSSION

History: The electric utility industry is undergoing significant changes in many of the other 49 states. Changes have resulted in part from the Public Utility Regulatory Policy Act of 1978 ("PURPA"), the Energy Policy Act of 1992, and Order No. 888 of the Federal Energy Regulatory Commission (FERC) authorizing "wholesale wheeling". (*Note: Order No. 888 does not apply to Alaska.*)

Traditionally, electric industry operations are divided into three major components: generation, transmission, and distribution. "Generation" is the creation of electrical energy. "Transmission" concerns long-distance, high-voltage transport of electricity from the generation site to the local distribution system. "Distribution" refers to the physical system that connects the transmission system and the consumer (or the "end user"). It is at the distribution level that high-voltage electricity is reduced to the lower voltage used by the consumer.

The industry in the Lower 48 has begun to move away from its traditional form (vertically integrated monopoly regulated structure) to more competitive structures. Several states have adopted or are considering changes in the way consumers receive electric service. As of July 1998, 13 states have passed restructuring legislation. The electric power industry in the Lower 48 states has been undergoing changes consistent with those mandated by the Energy Policy Act of 1992 and FERC Order No. 888. There are, at the federal level, new requirements for "comparable" transmission access and non-discriminatory availability of real-time network information and these are promoting competition in generation. Approximately half of the Lower 48 states have adopted or are considering changes in the way service is delivered to the consumer. These changes include introduction or examination of retail competition and consumer choice. Hawaii is also reviewing its options in the area of electric utility restructuring. Although FERC Order No. 888 does not apply to Alaska, many

Alaskans are interested in new business structures and benefits that might arise out of restructuring.

Experience to date has not established whether such restructuring efforts can provide sustained consumer benefits. Each state's program varies and most are in the beginning stages. Some states are conducting limited trials or demonstration projects (i.e., "pilot programs").

While "wholesale wheeling" has been authorized by the federal government, retail competition has not. "Wholesale wheeling" involves a system in which a distributor of power would have the option to buy its power from a variety of producers, and the producers would be able to compete to sell their power to a variety of distribution companies.¹ "Retail competition" would involve a system where more than one electric provider can sell to retail customers.² The ultimate goal is to foster greater freedom in the marketplace and yield lower real cost to consumers.

Restructuring: What is "restructuring" and what does it mean as opposed to "deregulation"? "Restructuring" is a term used to describe a method of allowing electric utilities to compete within a market area but still be regulated to some degree by the appropriate utility commission, in this case, the Alaska Public Utilities Commission (APUC). The term is also used to refer to the separation of various utility functions into individually-operated and -owned utilities.³ "Deregulation" would involve eliminating state regulation and most oversight such as has been done in other industries over the years (i.e., airline, telecommunications, etc).

A number of bills on retail wheeling have been introduced in both houses at the federal level, but have not been acted on. Alaska Senator Frank Murkowski chairs the Energy and Natural Resources Committee that will hear any proposals on this matter. Senator Murkowski has, more than once, stated that any changes in a state's regulatory structure regarding electrical utilities should be decided at the state level, to address that state's unique circumstances, not by federal mandate. (See Exhibit "B")

Lower 48: A full recitation of all the issues facing the Lower 48 in the area of electric restructuring is not covered by this Report and Recommendations. A summary of some of the major issues developed in each of the three operational segments is provided below:

¹ "Glossary," National Conference on State Legislature accessed through NCSL Web Site (<http://www.ncsl.org/programs/esnr/restru.html>)

² Ibid.

³ Ibid.

a. **GENERATION:** Electric restructuring in the Lower 48 States arises from regulatory and technological changes. PURPA created new classes of generation sources, separate from the traditional vertically integrated regulated utility structure. Technology made smaller units more economical, reducing the cost and time to construct, further permitting power generation outside of the traditional utility structure. Moreover, it requires utilities to purchase excess power from independent generators. The existence of different generation sources, offering energy from different sources under different price schedules, forms the basis for competition in the Lower 48 states.

There are concerns that joint ownership of generation and transmission facilities presents anti-competitive opportunities which should be addressed through some form of separation. Another concern that arises is the possibility that there might be an insufficient number of competitive sources for generation now or in the future.

b. **TRANSMISSION:** Facilities and regulatory issues are of concern in the transmission area. Electric power must be moved from the source ("generator") to a consumer/buyer located beyond traditional utility boundaries. In the Lower 48, transmission across large geographical areas is physically possible. The interstate power grid permits consumers in one state to access power produced in a different state. Transmission facilities are termed "bottleneck" facilities in that they cannot be economically replicated or effectively substituted for by competition. For example, vertically integrated utilities could arguably use control of the bottleneck transmission facilities (for which there is no competitive market) to favor sales of their own electrical generation (for which there is a competitive market). To address this potential problem, Congress encouraged FERC to open up the nationwide electric transmission system to wholesale suppliers. Order No. 888 established open access tariff requirements that provide non-utility wholesalers with access to the grid "comparable" to that afforded by the utility to itself and its affiliates. Order No. 889 provided for the establishment of real-time information systems and a code of conduct to ensure that all parties received non-discriminatory dispatch of their power. Alternatively, potential discrimination in transmission can be addressed by requiring the operation of the transmission network by an independent, non-utility entity, often called an "independent system operator" (ISO).

c. **LOCAL DISTRIBUTION:** Typically, a local electric utility offered electric energy as part of a "bundled" service offering which included (1) the electric energy itself, (2) delivery of energy to customers' premises, (3) meter reading, (4) billing, (5) customer services, and other matters. Under local distribution competition, electric energy is sold to end users separately from other

services or unbundled (i.e., similar to what is now being accomplished in the area of telecommunications) and this is sometimes referred to as "retail wheeling" or "direct access."

Retail wheeling raises many issues in the Lower 48 and from many utilities. Utility costs and rate processes are not geared to reflect unbundling and pricing of discreet services. From a consumer perspective, retail wheeling raises consumer information, universal service, and consumer protection issues. For the utilities, multi-party access to the local distribution system will require extensive operational, financial, and ratemaking adjustments as well as questions of ownership and operation of the local distribution system. For the consumer, rates for energy may increase instead of decreasing as unbundling occurs. High cost low volume customers may prove unattractive and therefore may be unserved or served at higher prices in a competitive market. Issues of "cherry-picking", universal service, and provider of last resort are of concern.

ALASKA: Alaska is not physically connected to the Lower 48 transmission grid; however, Alaska is not insulated from the social and political forces driving review and revision elsewhere in the country. Alaskan advocates for electrical restructuring are requesting that changes be made to the current system of exclusive certified service areas.

While the APUC has the authority under current law to issue certificates allowing competition in electric utility service⁴, the Commission to some appears to be reluctant to do so without further legislative guidance or encouragement. Cited as an example is APUC's rejection of the request made by Chugach Electric Association ("CEA") to provide electrical service to customers in the area certificated to Anchorage's Municipal Light & Power ("ML&P") (DOCKET U-97-201, date of opening: October 13, 1997; date of decision May 20, 1998). CEA asserted in its pleadings that there is nothing barring competitive services under anti-trust laws. However, the APUC took exception to CEA's position that it did not need a certificate to supply customers in the ML&P service area. Currently before the APUC are some dockets involving restructuring issues:

- a) Power pooling and dispatch planning among the Railbelt⁵ electric utilities (DOCKET U-97-140, date of opening:

⁴ April 30, 1997 letter from Office of the Attorney General, Department of Law, to Representatives Rokeberg and Sanders, page 1. (See Exhibit "A").

⁵ "Railbelt" utilities refers to the interconnected utilities of Chugach Electric Association, Inc. (CEA); Golden Valley Electric Association, Inc. (GVEA); Homer Electric Association, Inc. (HEA); Matanuska Electric Association, Inc. (MEA); the Municipality of Anchorage d/b/a Municipal Lights

September 1, 1994; decisions: September 10, 1997 started investigation. DOCKET is still open.)

- b) More general rulemaking inquiry into electric restructuring issues [DOCKET R-97-10, date of opening: around October 22, 1997 meeting; docket is still open (study linked.)]
- c) Aurora Power Resource, Inc. application to establish a pilot program (DOCKET U-98-114, date of filing: about June 26, 1998.)

The growing consensus is that some form of electrical restructuring will come to Alaska. It is a matter of when and how. The majority of witnesses before the Joint Committee agreed with that position; however, there were a few individuals and groups who thought restructuring did not make sense in Alaska at this time. Alaska Public Interest Research Group (AKPIRG¹) was very concerned about the implementation and effect of any restructuring efforts on consumers. The International Brotherhood of Electrical Workers (IBEW) voiced strong opposition to restructuring.

As noted in the Introduction, the Joint Committee received very little testimony from individual residential consumers. It is these consumers that could experience the greatest risk if electrical utility restructuring failed to achieve its goals.

It is noteworthy that there has been a change in attitude, primarily among rural electric providers who heretofore have feared and objected to any lessening of regulatory oversight in their market areas. This change has occurred in the course of the last two years as people have become more familiar with the issues. It appears at this time that some form of retail restructuring is likely. This results from the potential for "distributive technology," e.g. on-site micro-generator and alternate power sources, and consumer demand for more efficient energy generation and usage. In addition, retail resellers (e.g. Aurora Power) have requested authorization to enter the market at the retail level. Ultimately the Legislature may be involved in deciding if limited competition or restructuring will provide sustainable consumer benefits or be merely a matter of cost shifting from larger users to individual consumers.

¹ & Power (ML&P); City of Seward, Seward Electric Utilities Division (SES). Alaska Electric Generation & Transmission Cooperative, Inc. (AEG&T) is a wholesale supplier.

Alaska Structure of Electrical Utilities:

There are a number of features that make Alaska unique within the United States. Like Hawaii, Alaska is not a part of the national interconnected electrical grid. The special Alaskan features that need to be considered include lack of interconnection for the State, small market size, and consumer and public ownership of the infrastructure.

Interconnection and Market Size: Alaska has approximately 250,000 electrical consumers.⁶ Approximately 178,000 of these consumers reside in the Railbelt area. Of those in the Railbelt area, 105,159 reside and receive service from the three utilities serving the Municipality of Anchorage (CEA 65,709, ML&P 29,450,⁷ and MEA's MOA portion 10,000+/-).⁸ Alaska's electric system is not interconnected with the electrical grid in the Lower 48 and, in fact, only the Railbelt area of Alaska has a large intertie system. Most rural electric utilities are not connected to one another and thus serve as stand-alone power for their particular city, town or area. The area outside the Railbelt is not generally interconnected although there are some small regional connections. Communities in many of the non-interconnected areas rely on one main power source or plant. Additionally, there are nearly 200 small communities off the grid and some form of competition may exist in some of these communities in the form of the option of self-generation by large power users.⁹

While in the Lower 48 individual utility systems are connected by transmission with the same current frequency at all points, the same is not true in Alaska. Thus power cannot move in an unrestricted fashion as fully competitive markets may require.

Another atypical characteristic concern is that there is no significant non-utility generation base in Alaska from which electricity can be obtained. Surplus power is available from co-generation, smaller PURPA, and industrial sources, as well as alternative sources, i.e., solar, wind, and geothermal generation.

Consumer and Public Ownership of Infrastructure: The structure of electric utilities in Alaska is such that consumers own more than 90% of the companies (either through cooperatives which are owned by their members or through local government-owned utilities which are owned by the citizens of that

⁶ Alaska Rural Electric Cooperative Association, "Electric Utility Industry Restructuring in Alaska," Discussion Paper #1, August 18, 1998, page 7.

⁷ Telephone conversation with Bob Lohr, Executive Director, APUC, January 14, 1999.

⁸ Telephone conversation with Wayne Carmony, General Manager, MEA, January 14, 1999.

⁹ Alaska Rural Electric Cooperative Association, page 10.

local government).¹⁰ This is opposite of the existing structure in the Lower 48 states where a large percentage of electric utilities are investor-owned.

¹⁰ October 10, 1997 letter from Eric P. Yould, Executive Director, Alaska Rural Electric Cooperative Association, Inc., to Representative Rokeberg.

Issues of Concern

In the Lower 48, the electric industry has begun to move away from its traditional form – a vertically integrated, monopoly regulated structure – toward more competitive structures in some industry segments, primarily generation and wholesale wheeling. At the federal level, new requirements for new services are promoting competition in generations. At the state level, some states have adopted or are considering changes in the way local end use customers obtain electric service.¹¹ Where restructuring has been adopted, the ultimate goal has been to foster greater consumer freedom in the marketplace, wherever lower prices to consumers can be secured without adverse consequences in terms of the quality, availability and cost of electricity to all segments of the market.

The record developed by the Joint Committee reflects that there is no general consensus on the issues of whether and how restructuring will come to Alaska (the primary questions to be addressed by the Joint Committee). Some witnesses opposed changes in the status quo. Others favored substantial changes toward competition. Separately, disagreement existed on how policy makers should go about investigation of the need for and benefits of changes, and how to implement those changes if found appropriate. As examples, the Alaska Public Interest Research Group (AKPIRG) expressed concerns about the implementation and effects of any restructuring efforts on consumers. The International Brotherhood of Electrical Workers (IBEW) voiced strong opposition to restructuring. It should be noted, however, that the average residential customer is not aware of the issue at all.

Summarized below are some (but by no means all) of the concerns and issues brought before the Joint Committee during its hearings. The number and nature of these issues serve, at a minimum, to confirm the Legislature's view that electric restructuring is "a highly complex issue, carrying with it profound implications for all classes of electrical consumers." The order in which the issues are addressed should not be taken to imply any ranking by the Joint Committee concerning the importance of these issues – a matter better left for discussion and determination by the whole Legislature.

¹¹ National Conference of State Legislatures, fax cover sheet, July 9, 1998: As of July 1998, approximately 13 states had passed some form of restructuring legislation. The majority of states have not adopted such legislation.

Customer Choice and Sustained Competition

A principal question arises concerning whether there can be enough competitors to be competitive. That is, can a sustainable competitive market for local end-user service be developed? Some testimony and evidence before the committee suggests that there is no apparent competition on the wholesale level, and thus a necessary basis for local end-user competition is absent. Other witnesses argued that a form of wholesale competition does exist.¹² Separately, the record demonstrates that all major generation is utility-owned. There is no non-utility, competitively available generation in the state. Attempts like those in the Lower 48 to force the sale of generation facilities (in order to develop competitive markets) could seriously impact the consumers who own those facilities. As an example, in Anchorage the Municipal Charter authorizes sales of utility assets only upon the prior approval of 60% of the voters. In the view of some witnesses, any attempts by the Legislature or the APUC to mandate sales of facilities will cause serious legal problems.

Moreover, in the Railbelt area the major generator of electricity for sale to other utilities (including Golden Valley Electric Association, Matanuska Electric Association, Homer Electric Association, and Seward Electric Association) is one entity: Chugach Electric Association (CEA). Such concentration of market power at the wholesale level raises questions concerning the impact at the retail level, particularly in terms of alternative electric generation to compete against such a concentration.

A related concern in the competition area is how to address the long-term power contracts which CEA currently has in place. For example, if Company A has a long-term agreement (ending in 20 years) with Company B that calls for higher payments than would be had under competition, what happens? A questions arises as to whether any changes in payments could give rise to "stranded cost" (discussed above and as an issue below). On the other hand, if the wholesale market is in fact competitive, then issues concerning stranded cost should not arise, since it is the transition to competition which gives rise to such charges.

As indicated above, the Railbelt area's major generator of electricity for sale to other utilities is CEA. ML&P does sell to GVEA in direct competition with CEA and has competed with CEA for sales to the City of Seward. GVEA has the capability of entering the competition. Alaska Electric Generation & Transmission Cooperative, Inc. does not generate much but it actually

¹² Testimony of Eugene Bjornstad, General Manager, CEA, before the Joint Committee on August 8, 1998.

purchases and resells power to MEA and HEA which it purchases from CEA. Are there, then, enough entities to provide retail competition that would benefit the consumers?

Finally, as noted above, the absence of interconnection to the Lower 48 can cause potential problems. Consumers here cannot access competitive power from generating sources in other states, as consumers in the Lower 48 can. Nothing presented to the committee cures this limitation. Conversely, if anything happens in the course of restructuring to affect the quality, safety, or availability of Alaska's electric power, no help or remedy from the Lower 48 grid can be accessed, a matter of concern to more than one witness during our hearings.

The issues of mergers and acquisitions were also raised. Any consolidation would result in fewer potential competitors.

It is interesting to note, however, that the mere threat of competition has forced some lowering of rates in the Railbelt area. For example, MEA reduced rates for small businesses in 1998. CEA has testified that it did not pass along \$3.5 million in fuel costs due to the fear of competition in 1997.¹³

"Cherry-picking" and Cost Shifting

"Cherry-picking" is the process that occurs when a new entrant into the market offers to serve only the best or largest customers. If one competing utility only offers services to the largest customers and leaves the remainder with the former utility, the former utility, which has fixed costs to pay, would have to spread those fixed costs over its remaining customers. For example, if a utility's current wholesale long-term contracts are set aside (which could violate the utility's constitutional right to due process) that would leave all those costs incurred to serve wholesale customers residing with the utility's retail customers (i.e., "cost shifting"). The impact would be higher costs, particularly to residential customers and would thus defeat one of the purposes of restructuring – lowering the cost of electricity.

¹³ Ibid.

Consumer Protection

Retail competition would ideally bring about an entirely new system for the selection of service providers by consumers. Much like the old telecommunications system, where one used to go to the local telephone company and get all services (hookup, long-distance, local, etc.), an electric consumer now obtains all electric services on a combined or "bundled" basis from the local electric utility. Under competition, an electric consumer would ideally have more choices and therefore face more decisions. New, non-utility market participants would emerge, of varying capabilities and experience. The need for consumer education and protection, therefore, increases in a restructured environment. Among the matters to be considered in this area are:

- a) Consumer protection/advocacy to ensure that consumers obtain the lowest cost power consistent with safety, reliability, and long-term interest.
- b) Consumer education.
- c) Consumer Bill of Rights.

Universal Service

The concept that electric power and electrical services sufficient for basic needs should be available to virtually all members of the population is known as "universal service."¹⁴ A "provider of last resort" is a utility which addresses universal service by undertaking a legal obligation to provide service to customers where competitors have decided they do not want that customer's business. Questions arise concerning whether all service providers, competitors and utilities, should have the duty to serve all consumers on a non-discriminatory basis; or, if not, how will consumers at the margin receive quality service at affordable rates.

Currently there is no statutory mandate on universal service, although there is an obligation on a utility to provide service in a monopoly serving area. Cost of reaching a remote area may be borne by the residents of that remote area. For example, currently the process is to establish a cap on which services the provider will pay for and the consumer(s) will have to pay the difference between the cap and the actual cost of the service.

In the Alaska of today, electric service is just as important as any other utility service – from heating, water treatment, public safety, air traffic control, rescue operations, medical services, education, to cooking to bathing to

¹⁴ National Conference of State Legislatures.

running electronic equipment, Alaskans depend on electrical service. Obviously, in Alaska, electric service is more important than most other utility services, in part because many other utility services depend upon electricity for operation.

Power Pooling

"Power pooling" involves an entity established to coordinate short-term operations to maintain system stability and achieve least-cost dispatch.¹⁵

The APUC has received a report entitled "Power Pooling/Central Dispatch Planning Study" performed by the firm of Black and Veatch (Power Pooling Study). The final report on this study was issued in October 1998 and the Joint Committee reviewed the executive summary of the study and heard testimony from Black and Veatch. The study analyzed potential benefits of a power pool with central dispatch among the Railbelt Utilities in Alaska.¹⁶ From the results of the Power Pooling Study, it appears that some power pooling is currently in place; however, the anticipated savings from additional pooling are at a disappointingly low level.

Stranded Costs

A stranded cost is an investment which is economic at the time made, in a regulated environment, but which becomes uneconomic because of the transition to competitive markets. For example, Utility Y might have built a facility that was financed over a long period of time and that becomes obsolete under a competitive environment.

In Alaska, as noted above, consumers own all of the stranded investment, because they own (directly or indirectly) all the utility generation in the state. If no one pays for these stranded costs, then the consumer as owner suffers. If someone is to pay, who should it be? How much should be recovered? What recovery mechanisms should be employed? Stranded costs are not only a utility issue, they are also a State issue because the State owns and/or finances major transmission facilities. Local governments are also affected by stranded costs.

Also of consideration in the "stranded cost" area would be the long-term contracts in place for gas supply and wholesale power.

¹⁵ Ibid.

¹⁶ "Executive Summary", Power Pooling/Central Dispatch Planning Study, Docket U-97-140, page ES-1.

In the Lower 48 some stranded cost estimates run to the hundreds of millions of dollars. Alaska needs to determine what the exposure on stranded costs will be and how they will be recovered before competition can be considered for approval. Additionally, Alaska would need to develop guidelines as to what qualified as a stranded cost.

The questions for Alaska then are: Are stranded costs an issue in Alaska? If so, what are the stranded costs and what are their impacts?

Reliability/Safety

There were some concerns regarding preserving reliability and safety under competition. Like those in many other northern climates, Alaskans want to be sure that their electrical provider is reliable and has the capacity to address the needs of all its customers in a safe and timely manner. Additionally, the utility or competitive provider needs to have available increased power to meet peak load demands and/or unusual load demands caused by, for example, colder weather than normal. Spinning reserves and standby capacities are key issues. Where and how such demands would be met in a competitive market requires additional study.

Four-Dam Pool and other State-owned Facilities

The State may have some exposure on the Four-Dam Pool and other power generation and transmission lines. The State also has contractual obligations to the utilities involved and some of these are long-term. For example, the rates for power provided to communities from the State's Four-Dam Pool projects are set by long-standing contracts with the State.¹⁷

Statutory Guidance to the Alaska Public Utilities Commission

The record developed by the Joint Committee raises issues concerning the scope of current statutes; whether the Legislature should draft further legislation; and whether that legislation, if necessary or desirable, should be cast in terms of detail or broad guidance to the APUC. During its meetings, the Joint Committee discussed the role of the APUC in competitive market analysis and restructuring. The APUC indicated a preference for broad rather than overly detailed legislative guidance as to the State policy regarding competition for electrical utilities and providers.

¹⁷ Alaska Rural Electric Cooperative Association, page 10.

Some members of the Joint Committee would prefer legislation that establishes broad policy direction for the APUC. The APUC would then create the specifics of the regulatory regime. This course would avoid creating a de facto grant of legislative authority to a regulatory body. This approach recognizes that the regulatory body has the technical expertise to develop regulations but also that the Legislature should provide the broad outlines as to what the Legislature wants accomplished as to issues, such as universal service, access, reliability, cost shifting, consumer education, etc.

Other members of the Joint Committee believe that minimal statutory guidance is needed.¹⁸

Green Power

Several states have allowed utilities to offer electricity generated by renewable energy, such as wind, hydro and solar power at premium rates to customers. In some states, particularly California, consumers are opting for green power as a matter of choice.

¹⁸ April 30, 1997 letter from Office of the Attorney General (see Exhibit "A").

Pilot Program

A number of states have undertaken pilot programs on electric utility restructuring to see if such a restructuring would benefit their consumers. Many states have not utilized pilot programs. Others have terminated such programs relatively soon after inception. Here again, the general consensus of the testimony before the Joint Committee was that a well-designed pilot program limited in nature, geographical bounds (i.e., that is all or a portion of the Anchorage area), time, and customers could demonstrate if restructuring would benefit all or some Alaskans.

Should a pilot program be developed for the Railbelt area to see if competition would work in the largest interconnected area in Alaska? Many were concerned that competition in the rural area could involve a power seller coming in and "cherry-picking" off the largest customer in the community (i.e., the local school). This would mean that the local utility would be left with the rest of the load (probably mostly residential consumers) and prices might go up to cover the loss of a large customer. The same concerns are expressed by some of Alaska's larger electrical utility providers.

As the Railbelt is the only interconnected area, many believed that a pilot project should be limited in scope to either the Railbelt area or part of the Railbelt area. Part of the Study (see below) is development of a pilot program design.

The design of a pilot program could be based on geographic and population limits (i.e., 150,000 or more consumers), with a mandated ratio of access by large users (including industrial, public institutions, etc.) and residential consumers. In addition to the population requirement, some percentage of the overall electrical market in that area would be established as a maximum level of participation and the pilot program would have a sunset date. Participants in the pilot program would have to provide baseline and quarterly reports to the APUC.

Study of Electric Utility Restructuring in Alaska

APUC invited the Joint Committee to participate in a study on this complex and far-reaching issue – an issue that will affect every citizen in the state who pays an electricity bill. A Request For Proposal for a Study of Electric Utility Restructuring in Alaska (the Study) was issued in November 1998. Interviews were conducted on December 17 and the Selection Committee recommended contract award to CH2M Hill and its subcontractor, Econergy International Corporation. A letter of intent was issued to CH2M Hill on December 23, 1998. The protest period for that award expired on January 4, 1999. The consultant is now under contract and started proceeding with the Study during the week of January 11, 1999. The Study has two deliverables:

- (1) The first deliverable is due on March 1, 1999, and is to be a pilot program design recommendation.
- (2) The draft report on utility restructuring is due to be delivered on March 31, 1999. It is anticipated that the Legislature will hold committee hearings on the report during April 1999. The final report is due June 30, 1999. The consultant is required to be available until December 31, 1999, for consultations.

The Joint Committee's Findings and Conclusions on Electric Utility Restructuring

1. The Joint Committee recognizes that Alaska has many unique characteristics that need to be considered. Among these are: (a) Alaska is not part of the national electric grid; (b) The intertie system is limited to the Railbelt; (c) Extreme climatic conditions have an impact on use of electricity; (d) There are numerous non-interconnected small communities; (e) There is a lack of a non-utility generation base; (f) The overwhelming majority of electric utilities are publicly owned vs. investor-owned business structures; (g) There are substantial government investments in infrastructure; and (h) There are technical problems, i.e., electric current frequency incompatibility, if interconnections are contemplated with Canada.
2. It is the general consensus of the Joint Committee that some form of electric utility restructuring should be offered in Alaska if it can be demonstrated that there will be benefit to consumers.
3. The Joint Committee is split on the major issue of whether or not the Legislature should provide additional statutory guidance to APUC.
4. The Joint Committee finds that under the current statutes there is a lack of basic principles to guide the APUC on implementation of electric utility restructuring.
5. It was the Joint Committee's decision to join with APUC in authorizing the Study of the issue rather than make specific recommendations to the 21st Legislature. This will allow the results of the Study to guide future legislation.
6. The Joint Committee finds that the APUC has the statutory authority to authorize electric utility restructuring. Members of the Joint Committee vary in their opinions about why the APUC has not proceeded with electric utility restructuring in Alaska, including: (a) No utility has properly requested authority; (b) The belief that some of the APUC Commissioners oppose electrical competition; (c) The belief that the APUC is waiting for the Study and/or Legislative guidance; and (d) It's premature; the economic structure of Alaska's electric services cannot accommodate restructuring.

7. The Joint Committee is very concerned about the lack of public awareness and participation despite the best efforts of the Joint Committee to publicize both the meetings and the subject matter. The Joint Committee is concerned that residential consumers, in particular, will face a changed service system without being educated as to the impacts.
8. The Joint Committee finds that a pilot program would be desirable in Alaska if it can be designed in a meaningful manner. The program should provide baseline information with which to verify whether the multiple goals of electrical restructuring can be achieved beyond the demonstration program. That is: Can it benefit Alaskans? The design of the pilot program should rely heavily on the recommendations of the Study.

RECOMMENDATIONS

The Joint Committee on Electric Utility Restructuring recommends to the 21st Alaska State Legislature:

1. The 21st Legislature should take up the issue of electric restructuring based upon the body of testimony submitted to the Joint Committee and the Legislature should hold informational hearings to formalize this as an issue.
2. Upon receipt of the recommendation on March 1, 1999, for design of a retail access pilot program in Anchorage, the 21st Legislature should consider legislation that may be necessary to implement this program.
3. Use the Study results to decide if statutory changes are necessary for APUC to implement electric restructuring. The decision on whether or not electric restructuring should be implemented for all or part of Alaska should then be made.

APPENDIX

PERSONS TESTIFYING AT VARIOUS MEETINGS

Alaska Energy Associates: Robert Maxwell
Alaska Public Interest Research Group: Steve Conn
Alaska Public Utilities Commission: Commissioners Sam Cotten and Dwight Ormquist; Staff: Executive Director Bob Lohr, Paul Morrison.
Alaska Regional Hospital: Ernie Meier, President, Chief Executive Officer
Alaska Rural Electric Cooperative Association: Eric Yould, Executive Director
Dr. Peter Fox-Penner of The Brattle Group
Alaska Sales and Service: Ann Robinson
Anchorage Baptist Temple: Glenn Clary, Assistant Pastor
Aurora Power: Mary Ann Pease, Vice President; Robin Brena of Brena, Bell & Clarkson
Ausman, Earl
Barry, Mike
Beltrami, Vince
Black & Veatch: Myron Rollins
Copper Valley Electric Association: Robert A. Wilkinson, General Manager
Chugach Electric Association: Eugene Bjornstad, General Manager; Don Edwards, Counsel;
Enstar Natural Gas: Dick Barnes, President
Four-Dam Pool Purchasing Utilities: Robert A. Wilkinson
Giuchici, John
Golden Valley Electric Association (Fairbanks): Mike Kelly, President and Chief Executive Officer; Robert Hanson, Chief Operating Officer
Growth Resources: Dave Lappi, Chairman
Homer Electric Association: Norman Story, General Manager; Jim Patras
International Brotherhood of Electrical Workers: Gary Brooks, Business Manager
Jewel, Barbara
Kodiak Electric Association: Ed Kozak
Matanuska Electric Association: Bruce Scott, Consumer Relations
McKee, Charles
Municipal Light & Power (Anchorage): Meera Kohler, General Manager; Donn Wonnell, Attorney.
Signature Flight: Bruce Vergason, Plant Manager
Southeast Service Corporation: Ken Langsford, Facility Manager
Staudenmaier's Electric Merger Committee: Tom Staudenmaier

**PERSONS SUBMITTING WRITTEN
TESTIMONY (in addition to many previously
listed)**

Anchorage Sand and Gravel Co., Inc.: Steven M. Lofs, Vice President/General Manager
Best Western Barratt Inn: John J. Payne, General Manager
Bogan, Mary
Bonner, Laura
Cartwright, Pierce Co., Inc.: Pierce Cartwright, Chairman
Coppock, Stefanie
Davis, Paul
Doyle, Robert
Fancher, Will L.
Hallum, J. M.
Henke, Jerry
Henningsen, Richard S.
Hodge, Joseph
Ibele, Lyndon C.
Indelible Ink: Stu Kingsley
International Brotherhood of Electrical Workers, Local 1547: Mike Notar, Assistant Business Manager
Johnson, Alethea
Lang Consulting: Henry P. Lang, Electric Utility Engineer
Long, Richard
Mann, Nina M.
Marathon Oil Company: John A. Barnes, P.E., Alaska Region Manager
Miller, S. L.
O'Brien, Chris
Plumb, Gary and Vera
Regal Alaskan Hotel: Max F. Lowe, General Manager
Seitz, Bill
Smith, Darrell F.
Squiers, Richard
Utilities Consulting Services: Robert L. Huffman
Visual Information System: Donald B. Cassas
Webb's Business Consulting Services: William F. Webb

Weidner Investment Services: Gail Chamber, Regional Property Director
Weeks, Nadine
Westbrook Associates: William J. Westbrook, P.E.
Whitesides, Byron