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STATE OF ALASKA

THE REGULATORY COMMISSION OF ALASKA

Before Commissioners:

G. Nanette Thompson, Chair  
Bernie Smith  
Patricia M. DeMarco  
Will Abbott  
James S. Strandberg

In the Matter of Regulations Defining the Future  
Market Structure of Alaska's Electric Industry )  
)  
)  
)

R-97-10  
ORDER NO. 8

**ORDER TABLING ELECTRIC MARKET STRUCTURE ISSUES  
AND CLOSING DOCKET**

BY THE COMMISSION:

Summary

Through hearings and extensive comments from interested persons, we have examined the electric market structure study that we commissioned jointly with the Legislature. The Commission Staff (Staff) proposed an analysis of Railbelt electric contracts with input from concerned persons. After consideration of all the collected information and noting the guidance from the Legislature, we decide to defer any further consideration of retail electric utility restructuring and competition in Alaska. Projections of any potential benefits are too speculative at this time. Important factors such as natural gas supply, power transmission capacity, and technological improvements may significantly change the dynamics for future competition. We take no action now other than continuing to monitor the regulated Railbelt electric market. We close this Docket.

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Background

We opened this Docket to “determine the appropriate roles for competition and regulation in Alaska’s electric industry and implement the actions and changes the Commission finds appropriate.”<sup>1</sup> Together with the Alaska State Legislature,<sup>2</sup> we selected the firm of CH2M Hill to prepare a “Study of Electric Utility Restructuring in Alaska” (the Study). CH2M Hill submitted a draft of the Study on April 4, 1999.

We released the Study for comment.<sup>3</sup> All Railbelt electric utilities<sup>4</sup> submitted comments, as did Kodiak Electric Association, Inc. (KEA); Copper Valley Electric Association, Inc. (CVEA); and the Alaska Rural Electric Cooperative

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<sup>1</sup>Order R-97-10(1), dated April 30, 1999 (hereinafter Order No. 1), p. 1.

<sup>2</sup>The Legislative Joint Committee on Electric Utility Restructuring, a special committee of the Alaska State Legislature, heard testimony in two separate sessions during the 1999 and 2000 sessions. The Committee also issued two letters stating that electric utility restructuring is a public policy question that the Legislature should decide. (Letter from Representative Bill Hudson, Chair, House Utilities Restructuring Committee *et al.*, dated May 7, 1999, to the Alaska Public Utilities Commission, and letter from Representative Bill Hudson, Chair, House Utilities Restructuring Committee, *et al.*, dated April 20, 2000, to Governor Tony Knowles.)

<sup>3</sup>See Order No. 1.

<sup>4</sup>By the “Railbelt utilities” we mean the interconnected utilities of Chugach Electric Association, Inc. (Chugach); Golden Valley Electric Association, Inc. (GVEA); Homer Electric Association, Inc. (HEA); Matanuska Electric Association, Inc. (MEA); and the Municipality of Anchorage d/b/a Municipal Light & Power Department (ML&P). Alaska Electric Generation and Transmission Cooperative, Inc., is a wholesale supplier to HEA and MEA. The City of Seward’s electric system is a nonregulated municipal utility included within the Railbelt interconnection.

1 Association, Inc. (ARECA).<sup>5</sup> Generally, all commentors supported CH2M Hill's  
2 recommendation that electric restructuring must be approached with caution and only  
3 after thorough analysis of all of the potential risks and benefits.

4 ARECA commented that the Study presented a useful and informative  
5 description of the primary issues that policymakers must address when deciding  
6 whether to pursue electric restructuring in Alaska. HEA believed it is unclear that  
7 competition is appropriate for Alaska but stated that we should emphasize and further  
8 study market power and the status of wholesale power contracts. HEA stated the  
9 Study did not address how the existing wholesale contract would be affected by  
10 competition. HEA asserted the effects of these wholesale contracts must be evaluated  
11 in any approach to competition.

12 GVEA stated Alaska should not base its electric industry market  
13 structure policies on the conclusions set forth in the Study. GVEA asserted the Study  
14 did not address the uniqueness of Alaska or the level of success the electric industry  
15 in Alaska has achieved in providing low-cost power to consumers. GVEA further  
16 asserted that the Study did not provide a sound basis with which to move forward on  
17 efforts to promote different forms of competition. GVEA concluded that the  
18 expenditure of millions of dollars is unwarranted based on a study that shows, at best,  
19 marginal benefits and does not address the true cost of implementing the proposed  
20 alternative to the current system.

21 ML&P asserted that no quantitative analysis has yet been performed that  
22 demonstrates the existence of net positive benefits to consumers from restructuring.

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23 <sup>5</sup>Order No. 1 set a closing date of May 28, 1999, for comments on the Study,  
24 and required peer reviews of the document. Orders R-97-10(2), dated June 4, 1999;  
25 R-97-10(3), dated June 21, 1999; and R-97-10(4), dated June 21, 1999, extended the  
26 comment deadline.

1 CVEA stressed that the concerns of rural Alaska were not addressed adequately by  
2 the Study. CVEA pointed out that Alaskan utilities, notably most cooperatives, are  
3 changing the way they do business under the threat of competition. Because of this  
4 threat, CVEA asserted some discussion on this issue would be beneficial.

5 KEA pointed out that the study failed to discuss mid-size rural utilities,  
6 which are larger than “bush” utilities but not interconnected. A good portion of these  
7 utilities’ total customer load consists of large industrial customers. Many are  
8 connected to the Four Dam Pool.<sup>6</sup> KEA also pointed out that competition for these  
9 large industrial loads would have substantial, negative consequences on the  
10 residential ratepayers.

11 The Study’s authors made several presentations to the Legislative Joint  
12 Committee and to us to explain their analysis and conclusions. The final version of the  
13 Study, dated June 30, 1999, was submitted to us on July 6, 1999.

14 The Study considers retail electricity competition within what has become  
15 the standard framework for restructuring the industry. In this model, a centralized,  
16 nonprofit power exchange purchases electricity from generators and then sells the  
17 power to those who will ultimately market it to retail consumers. Transmission and  
18 distribution service continues to be regulated in the traditional manner. This  
19 restructuring template leaves open whether bilateral contracts between generators and  
20 marketers would be permitted, alongside sales to the central exchange.

21 Chugach, like most commentators on the Study, opposed creating a  
22 centralized power exchange. However, Chugach was alone among commentators in

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23 <sup>6</sup>During the 1980s, four of Alaska’s hydroelectric projects, Swan Lake, Terror  
24 Lake, Solomon Gulch and Tyee Lake were combined into one unit called the Four  
25 Dam Pool. These hydroelectric facilities are located in Petersburg-Wrangell, Kodiak,  
26 Valdez, and Ketchikan.

1 encouraging the Commission to move rapidly towards retail competition. An outline of  
2 Chugach's favored approach was appended to its comments to us<sup>7</sup> without  
3 elaboration. Instead, Chugach suggested that we initiate informal round-table  
4 discussions to develop a procedural timeline for addressing issues that we believe are  
5 worthy of further consideration.<sup>8</sup>

6 The Study proposed three different policy "packages" or paths the state  
7 can travel regarding future retail electric market structure:

- 8 • work within the current regulatory scheme to improve efficiency;
- 9 • move aggressively towards an open market in electricity with  
10 minimal regulatory oversight; or
- 11 • move more slowly but deliberately towards a competitive market  
12 but with considerable regulatory and legislative involvement at  
13 regular intervals.  
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15 The Study assumes the second and third paths would both yield the  
16 same competitive market structure but over a different time period and with a different  
17 level of regulatory oversight. Possible benefits and costs of restructuring the electricity  
18 market along the latter two paths are modeled.<sup>9</sup> Projected net benefits up to year  
19 2017 range from \$25 million to \$250 million, with stranded costs of \$35 million to  
20 \$200 million. Estimated costs to consumers from the exercise of market power go as  
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23 <sup>7</sup>See Appendix A to Chugach's Comments, dated June 1, 1999.

24 <sup>8</sup>Chugach Comments, p. 2.

25 <sup>9</sup>Modeling was generally over the period 1996-2017.

1 high as \$350 million. The wide range in possible net benefits is the result of  
2 uncertainty surrounding the future evolution of market structures.<sup>10</sup>

3 The Study included a “roadmap” for restructuring, including four discrete  
4 phases of transition:<sup>11</sup>

5 Restructuring Regulation – Conducting rulemaking, integrating  
6 agency activities, reviewing rate regulations to allow aggregation.

7 Preparing for Competition – Conducting cost studies, resource  
8 planning and acquisition processes; studying and designing a market for  
9 commodity energy.

10 Implementing – Unbundling rates; developing market power rules,  
11 reliability standards, pro forma tariffs, and governance rules; transferring  
12 operations to central dispatch authority; considering contract reformation;  
13 developing stranded-cost mitigation plan.

14 Start Up – Launching power exchange and Independent System  
15 Operator, initiating market power oversight and enforcement.

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17 The Study assumes significant input from the Legislature in the  
18 Restructuring Regulation phase and the Preparing for Competition phase, including  
19 statements of legislative intent, general legislative authorizations, legislative mandates,  
20 and appropriation of funds and tax legislation.

21 While the Study concludes that this is the appropriate time to begin  
22 preparing for competition in the electric utility industry, the Study excludes rural Alaska  
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24 <sup>10</sup>Executive Summary, p. ES-20.

25 <sup>11</sup>Executive Summary, Table ES-1.

1 from consideration for competitive market restructuring. Focusing on the Railbelt, the  
2 Study suggests a limited regulatory reform agenda aimed at maximizing the potential  
3 for market success and seizing short-term benefits available through the introduction  
4 of market-informed changes. The Study concludes that the Railbelt region is not yet  
5 ready for implementation of fully deregulated competition but recommends a gradual  
6 approach to restructuring.<sup>12</sup>

7 To help define the Railbelt market structure, we required Staff to  
8 assemble a summary of railbelt bilateral contracts. We released for comment a Staff  
9 work paper dated November 20, 2000, that summarizes existing Railbelt contracts for  
10 fuel, wholesale electric power, and transmission service (Contract Summary).<sup>13</sup>  
11 Comments were helpful in clarifying the wholesale power contract structure. We have  
12 incorporated industry comments in the Contract Summary, and the revised document  
13 has been used to address the existing bilateral contracts in Railbelt electrical structure,  
14 which was not detailed in the Study.

15 At our direction, Staff reviewed the Study, and on June 1, 2001,  
16 submitted its analysis and recommendation (Report). We released Staff's Report for a  
17 thirty-day period to afford all interested persons an opportunity to review it and file  
18 comments. (See Order R-97-10(7), dated June 22, 2001.) Numerous comments were  
19 timely filed in response to Staff's Report. In general, the comments supported Staff's  
20 analysis and recommendations although CH2M Hill voiced its objections to Staff's  
21 conclusions.

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<sup>12</sup>Executive Summary, p. ES-20.

24 <sup>13</sup>See Order R-97-10(5), dated November 27, 2000.



1 modeling work.<sup>14</sup> We disagree that retail competition is inevitable. Alaska faces  
2 neither legal nor economic pressures experienced by other States. Alaska is different  
3 from the contiguous Lower 48 states because, without interconnection to another  
4 state's energy transmission grid, Alaska does not need to respond to the actions of its  
5 neighbors. Also, many Lower 48 utilities have a large percentage of their power  
6 consumption load from industrial and large commercial customers. In contrast, large  
7 industrial and commercial users comprise less than two percent of the Alaskan Railbelt  
8 load. Most customers receiving service are residential and small business consumers.  
9 National data suggests that these kinds of customers benefit the least from retail  
10 electric competition.<sup>15</sup>

11 The Study projects potential savings from retail competition of \$41 million  
12 over the 20-year modeling time horizon. However, we find the model does not  
13 address:

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16 <sup>14</sup>The Study states:

17 Though it seems to proceed in fits and starts, the march of  
18 restructuring appears generally steady. This sets up a fundamental policy  
19 question for decision-makers in Alaska. On the one hand, the longer  
20 Alaska waits to move into restructuring, the better the base of knowledge  
21 and the experience from which to draw. On the other hand, delay may  
22 compromise Alaska's ability, and the ability of its electric industry, to  
23 harvest the potential benefits of a more competitively structured  
24 industry . . . . That is, Alaska policy makers can come to terms with how  
25 to accomplish electric utility restructuring in a manner that best serves the  
26 interests of the people and the State, while recognizing that there will  
continue to be debate about when restructuring should occur.

Executive Summary, p. ES-3.

<sup>15</sup>Fran Sevel, *The Consumer Response to Public Utility Competition*, National  
Regulatory Research Institute (June 2001).

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- the myriad long-term contracts for fuel and service that would need to be divested to create competitive markets;
- ownership of the Railbelt utilities: all are either member-owned cooperatives or municipalities; they are not investor-owned;<sup>16</sup> and
- the lack of transmission infrastructure and the concentrated ownership of generation resources, which could seriously impede competitive market formation.

Therefore, we find that, without additional detail considering unique Alaska factors such as these, the Study’s modeling work is not sufficient to rely on.<sup>17</sup>

Utility Business and Infrastructure

Alaska’s Railbelt utilities have secured a series of long-term contracts for both fuel and wholesale power. Some of these contracts will continue through the year 2014. If left in place, the contracts would limit the scope of competition and largely predetermine competitive market outcomes. Therefore, to capture the efficiency benefits that retail competition might theoretically offer, the contracts would need to be renegotiated. However, renegotiations of the existing contracts could be harmful and expensive. We believe these contracts have served Railbelt utilities and their customers well within the present context; they only pose difficulties in the context of a short-term competitive regime.

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<sup>16</sup>Aurora Energy, LLC (Aurora), located in Fairbanks, is the lone exception. Aurora supplies a very small fraction of overall Railbelt supply.

<sup>17</sup>It should be noted that the Study authors did recommend “retail simulation modeling as a part of the decision to move to a full retail competition pilot or retail competition.” Executive Summary, p. ES-4.

1           Railbelt power companies are primarily member-owner cooperatives or  
2 municipally owned. This also contrasts with the situation in the Lower 48 where  
3 investor-owned utilities are the predominant service providers. Cooperatives and  
4 municipally owned utilities enjoy low cost sources of debt and are tax exempt.  
5 However, both cooperatives and municipally owned utilities have limitations on the  
6 amount of power they can sell to nonmembers if they are to maintain these  
7 advantages.<sup>18</sup> Accordingly, a transition to retail competition might require these  
8 utilities to convert to investor-owned business structures that would have higher costs  
9 of debt and greater tax burdens.

10           We question whether the Railbelt boasts sufficient redundancy and scale  
11 of both infrastructure and demand to facilitate competitive markets in the near- to  
12 medium-term. Implementing a competitive market place requires a minimum number  
13 of providers that can compete to provide power on an equal basis. The Railbelt does  
14 not appear to meet this minimum threshold. At present, two providers in the  
15 Anchorage vicinity, Chugach and ML&P, generate over 85 percent of the electricity  
16 consumed in the Railbelt. Chugach by itself provides over 60 percent of the Railbelt's  
17 needs.<sup>19</sup> GVEA is largely responsible for the generation that is north of the Alaska  
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21           <sup>18</sup>Cooperatives that enjoy tax-exempt status may not derive more than 15  
22 percent of their income from non-members; see 26 U.S.C. § 501(c)(12)(B) (1999).  
23 Although strictures have been somewhat relaxed by a temporary IRS rule, many types  
24 of commercial sales may violate the terms of the tax-exempt bonds of municipally-  
25 owned utilities; see 26 U.S.C. § 142(f) (1999).

26           <sup>19</sup>See The Black and Veatch "Power Pooling / Central Dispatch Planning  
Study," October 1998, Docket U-97-140.

1 Range. It purchases some power from a private power producer<sup>20</sup> in the Fairbanks  
2 area.

3           Likewise, the Railbelt infrastructure for power transmission is neither  
4 extensive nor robust. Existing transmission constraints increase the possibilities that a  
5 major power producer would wield market power if a competitive regime were  
6 imposed. While the transmission backbone of the Railbelt system connects all users  
7 together in the same network, there are serious capacity issues. There are no  
8 duplicative transmission routes between major population centers. Moreover, it is  
9 unclear whether the transmission line between Fairbanks and Anchorage could be  
10 used to provide firm power. Similar transmission constraints exist to the Kenai  
11 Peninsula.

12           The limitations on sales to nonmembers faced by the cooperatives, the  
13 location of generation facilities, and the inadequate transmission grid make creation of  
14 an Alaskan competitive market an extremely difficult and expensive proposition. We  
15 conclude that implementing retail competition in a way that creates a level playing field  
16 and effectively fosters competitive outcomes would require at least the following  
17 changes to the Railbelt:

- 18           • restructuring of long-term fuel supply and power supply contracts;
- 19           • upgrading of transmission lines both for reliability and capacity;
- 20           • increasing the number of power producer companies in the power  
21           supply market to guard against market power abuse; and  
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24           <sup>20</sup>Aurora Energy, LLC, operates a 27-mw coal fired power plant in Fairbanks,  
25 Alaska.



1 present transmission link is capacity-constrained<sup>23</sup> and does not have the ability to  
2 transmit firm power, which we feel is necessary for retail competition to flourish.  
3 Further, these transmission constraints only serve to exacerbate problems of market  
4 power.<sup>24</sup>

#### 5 Increasing the Number of Power Producer Companies

6 To combat the problems of market concentration, the Study suggested  
7 the possible creation of a BTU<sup>25</sup> market, in which both electricity and natural gas is  
8 traded.<sup>26</sup> However, natural gas supply is not amenable to being allocated through  
9 liquid markets; virtually all Cook Inlet gas is already committed to long-term contracts  
10 for electricity, heating, or export. Therefore, creation of such a market presently  
11 appears impractical. The Study also introduced the idea of reducing the size of  
12 contracts traded in a competitive power exchange to only 500 kilowatt-hour.<sup>27</sup>  
13 However, trading in smaller units would not reduce the concentration, and hence  
14 market power, of those who initially own those tradable units.

15 Short of forced divestiture of generation assets, we see no way to reduce  
16 the concentration of generation assets in the Railbelt for the foreseeable future. It is  
17 not clear that such divestiture would be either practical or economical, compared to  
18 maintaining the status quo. Given the small population and relatively slow growth of  
19 the interconnected Railbelt, the problem of producer concentration and market power  
20 make an efficient retail power market unattainable.

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22 <sup>23</sup>The Study, p. 11.3.

23 <sup>24</sup>See Tables 9 and 10 of the Study, p. 11.11.

24 <sup>25</sup>British Thermal Unit.

25 <sup>26</sup>The Study, p. 2.6.

26 <sup>27</sup>The Study, p. 2.5.

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Business Structure Conversions

It is expected that because of prohibitions on the sale of power to non-members, and other debt covenants, both cooperatives and municipally owned utilities would need to change to alternate business structures to be able to participate in retail power marketing. Railbelt cooperatives and municipally owned utilities now enjoy sources of debt that have low cost, and the entities are tax exempt. Conversion away from current structures would entail higher costs of debt and a greater tax burden.

Chugach Proposal

We deal with Chugach's proposal to implement competition, included in its June 1, 1999, filing as Appendix A. Strictly speaking, Chugach did not present a proposal for retail restructuring to us. It offered a recommendation that we quickly move towards retail competition and suggested that Chugach convene informal discussions with interested persons to address the major questions it believed needed to be resolved. However, Chugach did append to its comments a presentation that it made to the Legislature on retail competition.

The essence of the Chugach proposal is to impose price-cap regulation on retail customers, and to deregulate sales to large commercial customers. It also suggests fully deregulating wholesale transactions (but with the proviso that existing wholesale contracts remain in effect). The experiment would be allowed to run two to three years, and a blue-ribbon panel would then recommend reversing, modifying, or continuing the measures. Chugach asserts that its proposal protects small customers, protects against the misuse of monopoly facilities, and is both safe and simple.



1 The transition to competition from the present regulated environment would expose  
2 ratepayers to significant risk.

3 Without convincing evidence of benefits, we will continue to monitor the  
4 dynamics that will influence policy, specifically the natural gas supply and  
5 improvements to power transmission up and down the Railbelt. Should the Legislature  
6 again take up policy concerning electric utility restructuring, we will assist it to achieve  
7 the greatest public benefit.

8 Allocating Costs

9 With the above determinations, all other substantive and procedural  
10 matters in this proceeding have been disposed of with the exception of the allocation  
11 of costs in accordance with AS 42.05.651 and 3 AAC 48.157. Inasmuch as this is a  
12 rulemaking proceeding, the allocable costs will be borne by the Commission.  
13 Therefore, this Docket should be closed.

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15 ORDER

16 THE COMMISSION FURTHER ORDERS:

- 17 1. No action will be taken on implementation of retail electric competition  
18 for Alaska at this time.
- 19 2. The allocable costs of this proceeding will be borne by the  
20 Commission.

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3. Docket R-97-10 is closed.

DATED AND EFFECTIVE at Anchorage, Alaska, this 28th day of September, 2001.

BY DIRECTION OF THE COMMISSION

( S E A L )