

**CHUGACH ELECTRIC ASSOCIATION, INC.**  
**Anchorage, Alaska**

**BOARD MEETING**  
**AGENDA ITEM SUMMARY**

**December 17, 2003**

**ACTION REQUIRED**

**AGENDA ITEM NO. IX.E.**

- Information Only  
 Motion  
 Resolution  
 Executive Session  
 Other
- 

**TOPIC**

The new South Anchorage Substation is under design and construction is scheduled to begin in late summer of 2004. Project authorization is requested.

**DISCUSSION**

Installation of a new 138/34.5kV substation is planned in south Anchorage. This substation and associated transmission and subtransmission lines are necessary to supply the increasing system demands in the area. The existing 34.5kV subtransmission lines are no longer able to transfer the projected loads if any one link is out of service. Approval of the South Anchorage Substation Project will assure adequate power supply in South Anchorage within the timeframe required.

**OTHER OPTIONS EXPLORED**

Alternatives to the proposed action have been investigated in a 34.5kV Long Range Plan (11/97) and a subsequent update (01/03) and would consist of major upgrades and additions to the 34.5kV system as well as addition of voltage support equipment (capacitors) in all substations in the area. Costs for these improvements have been found to exceed those of the proposed action and would only serve to postpone installation of transmission facilities by 5 to 7 years. We have also investigated whether installing transmission facilities in existing substations in the area would be feasible at lower costs and found that similar to subtransmission upgrades, overall costs would be higher since reliability could only be assured if many of the 34.5kV line and switchgear upgrades are undertaken at the same time.

**CHIEF EXECUTIVE OFFICER'S RECOMMENDATION**

Motion: Move that the Chugach Board of Directors give project authorization for construction of a new bulk substation in south Anchorage with an estimated cost of \$11,000,000 to \$14,000,000 and an estimated completion date of December 2005.