SUMMARY

The physical-chemical testing of fly ashes indicates that, <u>under normal operating conditions</u>, a low variability of results can be expected from a particular generating plant unit. However, unannounced changes in coal source and/or plant operations do occur and they may result in an ash with undesirable properties. Since these properties can be detected by physicalchemical testing, it is recommended that this testing be performed on a lot-by-lot basis when a plant is supplying fly ash to a construction project.

PURPOSE AND SCOPE

The purpose of this study of fly ashes was to characterize their variability so as to determine if future testing should be on a certified source basis or on a lot-by-lot basis.

The study concentrated on three of the fly ashes being marketed in the state.

MATERIALS

The fly ashes used were obtained from Council Bluffs No. 3, Sioux City Port Neal No. 3 and Sioux City Port Neal No. 4 generating plants.

Several other ashes were also included on a limited basis. These were Dubuque, Nebraska City, Lansing, Clinton and North Omaha.

11

1