CONTENTS

Papers	Page
SURGE STUDIES FOR PORTAGE MOUNTAIN TAILRACE SYSTEM by Kenneth C. Wilson	1
IMPROVED APPEARANCE OF SWITCHYARDS AND SUBSTATIONS by Edwin Rose and Dwight A. Covington	17
HYDRAULIC PERFORMANCE OF PENSTOCK TRIFURCATIONS by Palepu V. Rao, H. C. Misra, R. V. Juyal and S. N. P. Sharma	35
COOLING TOWER APPLICATIONS IN POWER CYCLE DESIGN by Arthur J. Fiehn	55
WIND INFLUENCE UPON COOLING WATER CIRCULATION by Gerrit Abraham and Rob Koudstaal	63
ANALYSIS AND DESIGN OF TOWER FOUNDATIONS by Richard L. Wiggins	77
EDWARD HYATT POWERPLANT INTAKE STRUCTURE by Paul H. Gilbert	101
CONSIDERATIONS IN DESIGN OF AIR MONITORING NETWORK by Alroy F. Aschoff	119
TVA'S AIR QUALITY MANAGEMENT PROGRAM by Fred W. Thomas	131

(over)

This Journal is published quarterly by the American Society of Civil Engineers. Publications office is at 2500 South State Street, Ann Arbor, Michigan 48104. Editorial and General Offices are at 345 East 47th Street, New York, N.Y. 10017. Subscription price is \$8.00 per year with discounts to members and libraries. CO, UP, PO, PP, SU, TE.

DISC USSION

Proc. Paper 6442

ELECTRIC TRANSMISSION TOWER DESIGN, ^a	
by Matthew Marjerrison (May, 1968).	
by Walter G. Thomas	147
by Gene M. Wilhoite	148
by Joseph R. Arena	149
RESEARCH NEEDS IN CIVIL ENGINEERING ASPECTS OF	
POWER, ^a by The Research Committee, Power Division,	
ASCE (May, 1968).	
by Adolf A. Meyer	150

INFORMATION RETRIEVAL

The key words, abstract, and reference "cards" for each article in this Journal represent part of the ASCE participation in the EJC information retrieval plan. The retrieval data are placed herein so that each can be cut out, placed on a 3×5 card and given an accession number for the user's file. The accession number is then entered on key word cards so that the user can subsequently match key words to choose the articles he wishes. Details of this program were given in an August, 1962 article in CIVIL ENGINEERING, reprints of which are available on request to ASCE headquarters.

^a Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.