CONTENTS

Papers

1	Page
Side Stream Intakes for Hydro Power in Scotland by Edgar Burke Wilson and John Alexander Stevenson	1
Hydro Project Formulation: Results in the Southeast by Henry C. C. Weinkauff and Clement P. Lindner	15
Value of Pumped Storage in a Thermal System by Wilbur R. Barrows	29
The Review Function in Water Resources Development by Edmund H. Lang	39
Specification Tolerances for Turbine Homology by Edward J. Groscurth	55
Hydropower Project Output Optimization by Warren A. Hall and Theodore G. Roefs	67
The Lewis Smith Rockfill Dam by James A. Tyson	81
Cost and Economics of Maintenance of Turbine Runner Cavitation by Harold G. Hunt	107
(over)	

DISCUSSION

Design of the Karadj Arch Dam, by Jan A. Veltrop and Roman P. Wengler. (March, 1964. Prior dis- cussion: May, 1965. Discussion closed.) by Jan A. Veltrop and Roman P. Wengler (closure)	117
Tumut 2 Underground Power Plant, by Ivor L. Pinkerton and E. J. Gibson. (March, 1964. Prior discussion: July, October, 1964, and May, 1965. Discussion closed.) by Ivor L. Pinkerton and E. J. Gibson (closure)	118
Tunnels for Hydroelectric Power in Tasmania, by Henry H. Thomas and Lindsay S. Whitham. (October, 1964. Prior discussion: May, 1965. Discussion closed.) by Henry H. Thomas and Lindsay S. Whitham (closure)	123
Unlined Tunnels of the Snowy Mountains Hydro-Electric Authority, by H. E. Dann, W. P. Hartwig, and J. R. Hunter. (October, 1964. Prior discussion: May, 1965. Discussion closed.) by H. E. Dann, W. P. Hartwig and J. R. Hunter (closure)	125
Tests Verify Design for TVA's 500-kv Towers, by Gene M. Wilhoite. (October, 1964. Prior discussion: May, 1965. Discussion closed.) by Gene M. Wilhoite (closure)	129
Contractor's View on Unlined Tunnels, by Alfred M. Petrofsky. (October, 1964. Prior discussion: May, 1965. Discussion closed.) by Alfred M. Petrofsky	131
Unlined Tunnels of the Southern California Edison Company, by Ralph W. Spencer, Bruce R. Laverty, and Dean M. Barber. (October, 1964. Prior discussion: May, 1965. Discussion closed.) by Ralph W. Spencer, Bruce R. Laverty and Dean M. Barber (closure)	133
Evaluation of Recreation in Water Developments, by William W. White. (May, 1965. Prior discussion: None. Discussion closed.)	194
by Asit K. Biswas	134

	Page
Hydroelectric Developments in Scottish Highlands, by Asit K. Biswas. (May, 1965. Prior discussion: None. Discussion closed.) by Edward M. Gosschalk	138 139
Hydraulic Studies of Large Penstock Trifurcation, by John S. Gladwell and E. Roy Tinney. (May, 1965. Prior discussion: None. Discussion closed.)	
by Eugen Ruus	140
by B. C. Syamala Rao and N. S. Lakshmana Rao	141
by Alan F. Babb	142
by David I. H. Barr	143
by Y. R. Reddy and Subir Karr	146