

Hydraulic Design Publications, Reports, and Presentations

Ratliff, M., P. March, and P. Kirchner, "Failure Forensics and Re-Design of Reversible Flow Draft Tube Trash Racks at a Pumped-Storage Plant," *Proceedings of HydroVision 2012*, Tulsa, Oklahoma: PennWell Corporation, July 2012.

March, P. A., "Review and Assessment of the Potential for Generation During Low Head Operations, Alcoa Power Generating Inc.'s Chilhowee Project," Report No. 0801, Nashville, Tennessee: Hydro Performance Processes Inc., March 2008.

March, P. A., "Improving Flow Measurements in Short, Converging Intakes," Electric Power Research Institute Collaborative Project Meeting, Waterpower XV, July 2007.

March, P. A., B. T. Smith, A. W. Wilson, and F. Sotiropoulos, "Achieving Improved Flow Measurements for the Hydroelectric Power Industry," *Proceedings of HydroVision 2006*, Kansas City, Missouri: HCI Publications, August 2006.

Franke, G. F., D. R. Webb, R. K. Fisher, D. Mathur, P. N. Hopping, P. A. March, M. Headrick, I. Laczó, Y. Ventikos, and F. Sotiropoulos, "Development of Environmentally Advanced Hydropower Turbine System Design Concepts," York, Pennsylvania: Voith Hydro, Inc., Report No. 2677-0141, U.S. Department of Energy Contract DE-AC07-96ID13382, July 1997.

Almquist, C. W., and P. A. March, "Dow Valve Tests at the Santeetlah Development," Report 93-6, July 1993.

March, P. A., and R. E. Elder, "Review of the 1:25 Scale Hydraulic Model, Olmsted Wicket Dam," January 1993.

Rizk, T.J., P.A. March, and C.W. Almquist, "Numerical and Physical Modeling for Condenser Flow Measurement," *Proceedings of the ASME Forum on Industrial and Environmental Applications of Fluid Mechanics*, New York: American Society of Mechanical Engineers, November 1992.

Almquist, C.W., and P.A. March, "Emergency Closure Tests of High-Head Intake Gate, Santeetlah Project," Report 92-3, October 1992.

Almquist, C.W., and P.A. March, "Analytical and Experimental Study of Jet Targeting," *Proceedings of the ASCE National Hydraulic Engineering Conference*, Nashville, TN, August 1991.

March, P.A., "Gas Flow Model for Reducing Fly Ash Erosion of Economizer Tubes," Norris, Tennessee: Tennessee Valley Authority, Engineering Laboratory Report No. WR28-3-37-104, September 1989.

March, P.A., and C.W. Almquist, "New Techniques for Monitoring Condenser Flow Rate and Fouling," *Power*, March 1989, pp. 73-76.

March, P.A., and C.W. Almquist, "Techniques for Monitoring Flowrate and Hydraulic Fouling of Main Steam Condensers," *Proceedings of the Electric Power Research Institute Condenser Technology Symposium*, CS-5942-SR, September 1988.

Moss, R. D., S. P. Gautney, and P. A. March, "Targeted Chlorination: Design and Field Studies," *Proceedings of the Fifth Conference on Environmental Impacts and Health Effects of Water Chlorination*, 1984.

March, P. A., "Evaluation of Targeted Chlorination Alternatives Using a Condenser Flow Model," Norris, Tennessee: Tennessee Valley Authority, Engineering Laboratory Report No. WR28-1-620-100, December 1983.

Grant, W.S., and P.A. March, "Preliminary Design Guidelines for Feedwater Pump Suction Systems," EPRI Preliminary Report, December 1982.

March, P.A., "Flow Modeling of Suction Piping for Reactor Safeguard System Pumps," Norris, Tennessee: Tennessee Valley Authority, Engineering Laboratory Report No. WR28-1-93-101, June 1982.

March, P.A., "Intaking and Backwashing Performance of a Perforated Pipe Intake, Clinch River Breeder Reactor Project," Norris, Tennessee: Tennessee Valley Authority, Engineering Laboratory Report No. WR28-1-90-102, February 1981.

Fain, T.G., and P.A. March, "Hydraulic Model Study of the Circulating Water Pumphouse Basin, Clinch River Breeder Reactor Project," Norris, Tennessee: Tennessee Valley Authority, Engineering Laboratory Report No. WR28-1-90-100, December 1980.

Fain, T.G., and P.A. March, "Hydraulic Model Study of the River Water Pumphouse Basin, Clinch River Breeder Reactor Project," Norris, Tennessee: Tennessee Valley Authority, Engineering Laboratory Report No. WR28-1-90-103, December 1980.

March, P.A., "Velocity Distributions and Turbulence Intensities in a Single- Pass Condenser Model, Clinch River Breeder Reactor Project," Norris, Tennessee: Tennessee Valley Authority, Engineering Laboratory Report No. WR28-1-90-101, December 1980.

March, P.A., "Quality Assurance Procedure for Conducting Physical Model Studies and Physical Testing Programs," TVA SP-15.01, Rev. 1, August 1980.

March, P.A., "Velocity Distributions, Turbulence Intensities, and Flow Patterns in a Two-Pass Condenser Model," *ASME Journal of Engineering for Power*, Vol. 101, July 1979.

Durgin, W.W., R. Nyquist, and P.A. March, "Flow-Induced Vibration of Submerged Hollow-Cone Valves," Alden Research Laboratory Report, November 1978.

March, P.A., "Thermal and Hydraulic Performance of Experimental Spray Cooling Nozzles," Alden Research Laboratory Report No. 10-78/M136DF, February 1978.

March, P.A., "Condenser Model Study, Hope Creek Nuclear Generating Station," Alden Research Laboratory Report No. 9-78/M358AF, February 1978.

March, P.A., and J.F. Noreika, "Investigation of Swirl and Axial Velocity Distributions in Suction Piping, New Haven Harbor Generating Station," Alden Research Laboratory Report No. 127-77/M270AF, August 1977.

March, P.A., "Investigation of Nappe Oscillation in Hydraulically Actuated Crest Gates," Alden Research Laboratory Report, July 1977.

March, P.A., "Hydraulic Model Test of Condenser Inlet Tunnel, North Anna Units 3 and 4," Alden Research Laboratory Report No. 60-77/M250BF, March 1977.

March, P.A., "Hydraulic Model Study of Condenser Inlet Waterbox, Salem Nuclear Generating Station," Alden Research Laboratory Report No. 25-77/M302BF, January 1977.

March, P.A., and R. Nyquist, "Experimental Study of Intake Structures, Seabrook Station," Alden Research Laboratory Report No. 130-76/M298CF, November 1976.

March, P.A., and P.J. Smith, "Experimental Study of Discharge Structures, Seabrook Station," Alden Research Laboratory Report No. 130-76/M296CF, November 1976.

Contact information:

Patrick A. March
President and Principal Consultant
Hydro Performance Processes Inc. (EIN 20-1959788)
2394 Turk Road, Doylestown, Pennsylvania 18901-2963
pamarch@hydroppi.com; pamarch@gmail.com
Cell Phone: 1.865.603.0175
Office Fax/Phone: 1.215.348.1068