TUESDAY 99/06/01 08:30 - 11:30 ROOM

Session B1 INSTRUMENTATION & CONTROL — HAMPSTEAD
Chair: Ken SERDULA
Serdula Systems

Session B2 THERMALHYDRAULICS 2 — CÔTE ST-LUC
Chair: Michel GARCEAU
Hydro-Québec

Session B3 REACTOR PHYSICS 2 — VERDUN
Chair: David JENKINS
AECL

Session B4 OPERATIONS & MAINTENANCE 2 — LASALLE
Chair: Paul THOMPSON
New Brunswick Power

GUIDE SEARCH AUTHORS

MONDAY 99/05/31 14:00 - 17:00 ROOM

Session A1 CHEMISTRY, RADIATION & ENVIRONMENT — HAMPSTEAD
Chair: Hugues BONIN
Royal Military College

Session A2 THERMALHYDRAULICS 1 — CÔTE ST-LUC
Chair: Anne-Marie GIRARD
AECL

Session A3 REACTOR PHYSICS 1 — VERDUN
Chair: Guy HOTTE
Hydro-Québec

Session A4 OPERATIONS & MAINTENANCE 1 — LASALLE
Chair: Mike GAY
New Brunswick Power

TUESDAY 99/06/01 14:00 - 17:00 ROOM

Session C1 CONTROL ROOM OPERATIONS — HAMPSTEAD
Chair: Eric DAVEY
Crew Systems Solutions

Session C2 SAFETY & LICENSING — CÔTE ST-LUC
Chair: Jean-Claude AMROUNI
AECL

Session C3 REACTOR PHYSICS 3 — VERDUN
Chair: Daniel ROZON
Ecole Polytechique de Montréal

Session C4 Q.A., REGULATORY & WASTE MANAGEMENT — LASALLE
Chair: Paul LAFRENIÈRE
AECL

SESSION A1:
CHEMISTRY, RADIATION & ENVIRONMENT

Determination of 17 Elements in 20 Canadian Mineral Waters by Evaporation and Systematic Instrumental Neutron Activation

Pham Van DUONG & Lubomir ZIKOVSKY,
École Polytechnique de Montréal, Dépt. de génie mécanique, Institut de génie nucléaire

Inspection Surveys of X-Ray Inspection Systems: Results of Five Years and Implications on Future Management of Radiation Risks

H. P. MAHARAJ,
Health Canada, Radio Protection Bureau

ChemAND - A System Health Monitor for Plant Chemistry

C. W. TURNER, G. R. MITCHEL, P. V. BALAKRISHNAN & G. TOSELLO,
Atomic Energy of Canada Limited

A Study on the Behavior of Debris Around a Sump of a Safety Cooling System

Jin-Hyo BAE & Man Heung PARK,
Korea Power Engineering Company Inc.

Nuclear Power and Carbon Dioxide Free Automobiles

Duane R. PENDERGAST, Atomic Energy of Canada Limited

Nuclear Energy in Industry: Application to Oil Production

John K. DONNELLY, Marengo Energy Research Limited &
DUANE R. PENDERGAST, Atomic Energy of Canada Limited

SESSION A2: THERMALHYDRAULICS 1

The Solution of Sparse Matrices in CATHENA
Thomas G. BEUTHE & J. B. HEDLEY,
Atomic Energy of Canada Limited

Application of the CATHENA Thermalhydraulics Code to MAPLE Research Reactor Safety Analysis
Nick K. POPOV, R. KOUYOUMDJIAN, H. SILLS, A. G. LEE, Atomic Energy of Canada Limited
& Vince LANGMAN, Ontario Power Generation Inc.

Endshield Tubesheets Response to Impact Velocity Due to Reverse Flow Resulting from Large LOCA
N. N. WAHBA, J. K. CHAN & M. H. BAYOUMI, Ontario Power Generation Inc.

CANDU 9 Large LOCA Uncertainty Analysis
Amad ABDUL-RAZZAK & Maw-Rong LIN, Atomic Energy of Canada Limited

ASSERT-PV Simulations of Two-Phase Flow in Horizontal and Vertical Subchannels
J.-W. PARK, K. M. CHAE & H. CHOI, Korea Atomic Energy Research Institute

Flow Stability of Liquid Metal Flow Under Transverse Magnetic Field
Hee Reyoung KIM, Ho-Yun NAM & Yong-Kyun KIM,
Korea Atomic Energy Research Institute

SESSION A3:
REACTOR PHYSICS 1

Evaluation of Supercell Methodologies using ZED-2 Measurements
Benoît ARSENAULT & H.C. CHOW, Atomic Energy of Canada Limited

Development of NDA Measurement Method to Determine the Fissile Material Contents for DUPIC Fuel
Hee Young KANG, Young Gil LEE,Hong Ryul CHA, Gil Mo KU, Ho Dong KIM, Jong Sook HONG & Myung Seung YANG, Korea Atomic Energy Research Institute

MCNP Analysis of a D2O-Filled Fuel- Channel Penetration Through the End Shield
L. KIRILOVSKY & K. T. TSANG, Atomic Energy of Canada Limited

Development of an Isotopic Depletion Method for Reactor Core Calculations
M. BOUBCHER, Guy MARLEAU & Daniel ROZON,
École Polytechnique de Montréal, Dépt. de génie mécanique, Institut de génie nucléaire

Development of Limiting Decay Heat Values
V. A. KHOTYLEV, J. W. THOMPSON, Atlantic Nuclear Services Limited
& R. A. GIBB, New Brunswick Power

SESSION A4:
OPERATIONS & MAINTENANCE 1

Coherent Structures in the Gaps of Rod Bundles
M. S. GUELLOUZ & S. TAVOULARIS,
University of Ottawa, Department of Mechanical Engineering

Thermalhydraulic Characteristics of CANDU 9 Moderator
Ji ZHANG & Maw-Rong LIN,
Atomic Energy of Canada Limited

Assessment of Fuel Cooling Under Shutdown Conditions in Gentilly 2
Parviz GULSHANI , Atomic Energy of Canada Limited
& Hong HUYNH, Hydro-Québec

Effectiveness of the High Capacity Blowdown for Steam Generator Sludge Removal
Se Jin BAIK, D.M. CHUNG & T. S. RO,
Korea Power Engineering Company Inc.

SESSION B1: INSTRUMENTATION & CONTROL

Measurement of the Dynamic Response of Differential Pressure Transmitters Using a Response Time Tester
H. W. HINDS, Atomic Energy of Canada Limited

Determining Prompt Fractions of In-Core Flux Detectors During Full-Power Operation in CANDU
B. SUR, P. KUMLI, J. P. JOHNSTON & P. D. TONNER, Atomic Energy of Canada Limited

The Measurement and Analysis of the Dynamic Response of Alarm Units
H. W. HINDS, Atomic Energy of Canada Limited

Dynamic Response of the SDS Flow-Measurement System in CANDU
V. T. KOSLOWSKY, H. W. HINDS, P. D. TONNER, Atomic Energy of Canada Limited
& O. GLÖCKLER, Ontario Power Generation Inc.

Computing Channel RTD Systematic Errors Using Small Reactor Derates
V. COSTIUC, J. HANDBURY, Atlantic Nuclear Services Limited
& T. WHYNOT, New Brunswick Power

Commercial Aircrew Radiation Dosimetry using a Tissue Equivalent Proportional Counter
Anna Rae GREEN, B. J. LEWIS, LG. I. BENNETT, M. PIERRE, Royal Military College of Canada
& T. COUSINS, Defense Research Establishment Ottawa

SESSION B2: THERMALHYDRAULICS 2

Characterization of the Slug Formation in Counter-Current Two-Phase Flows

Alberto TEYSSEDOU, N. ONDER,
École Polytechnique de Montréal, Dépt. de génie mécanique, Institut de génie nucléaire,
H. SAYGIN , Istanbul Technical University
& H. HUYNH, Hydro-Québec

Prediction of the Flooding Point in a Vertical to Horizontal Tube With and Without Obstructions

Peter TYE, Alberto TEYSSEDOU, Altan TAPUCU,
École Polytechnique de Montréal, Dépt. de génie mécanique, Institut de génie nucléaire
& W.I. MIDVIDY (Deceased), Ontario Power Generation Inc.

Application of Experience to the Design of the Steam Generators for the CANDU 9

James C. SMITH, Babcock & Wilcox Canada

On the Prediction of Fretting Wear of Heat Exchanger / Steam Generator Tubing

San IYER, Babcock & Wilcox Canada

Pressurizer Manway Closure Re-Engineering

R. HORVATH, J. TANG, D. JOUDREY, J. MILLMAN, Babcock & Wilcox Canada
& D. PRITCHARD, Ontario Power Generation Inc.

SESSION B3:
REACTOR PHYSICS 2

Validation of WIMS-AECL / 3DDT Code Package Using the IAEA 10 MW Benchmark Problem for the McMaster Nuclear Reactor Fuel Conversion Analysis

Hassan ALBASHA,
McMaster University

Self-Collision Rebalancing Technique for the MCI Characteristics Solver

G. J. WU & Robert ROY,
École Polytechnique de Montréal, Dépt. de génie mécanique, Institut de génie nucléaire

Generation of Microscopic Pseudo-Fission Products Properties

H. BENJAAFAR & Guy MARLEAU,
École Polytechnique de Montréal, Dépt. de génie mécanique, Institut de génie nucléaire

The Effect of PWR Fuel Management Strategy on DUPIC Fuel Cycle

Wei SHEN & Daniel ROZON,
École Polytechnique de Montréal, Dépt. de génie mécanique, Institut de génie nucléaire

Experimental and Computational Determination of Radiation Dose Rates in the Slowpoke-2 Research Reactor at the Royal Military College of Canada

Greg B. LAMARRE & Hugues W. BONIN,
Royal Military College of Canada

SESSION B4:
OPERATIONS & MAINTENANCE 2

Development of Special Tools for the Cleaning of Reactor's Interior in HANARO

Yeong-Garp CHO, Jung-Hee LEE, Jeong-Soo RYU, Jong-Sup WU & Hoan-Sung JUNG,
Korea Atomic Energy Research Institute

Significance of Beta and Gamma Dose on Environmental Qualification of Components

K. M. AYDOGDU & K. T. TSANG,
Atomic Energy of Canada Limited

Point Lepreau Generating Station Strategic Planning Process Integrating Strategic Objectives Into Operational Planning

Syd TURNER, New Brunswick Power

The Unavailability and Delay Time of an Action Due to the Drift of the Instruments

Huang TANG, New Brunswick Power

CANFLEX Demonstration Irradiation at Point Lepreau: Background and Observations

R. A. GIBB, R. W. SANCTON, New Brunswick Power,
P. J. REID, ALARA Research Inc.
& Josephine BULLERWELL, Centre for Nuclear Energy Research, University of New Brunswick

SESSION C1:
CONTROL ROOM OPERATIONS

Improvements to the Control Room Operator Workspace at Point Lepreau

Tom HITCHCOCK, H. STOREY, Control Computer Group, New Brunswick Power,
Eric DAVEY, Crew Systems Solutions
& Bryan K. PATTERSON, Human Factors Practical

Control Room Monitoring of Process Conditions and Identification of Improvements to Darlington Monitoring Displays

Eric DAVEY, Crew Systems Solutions,
M. TONELLO, Ontario Power Generation Inc.
& D. RIVERA, Atomic Energy of Canada Limited

Implementation of New Operations Standards at Darlington Nuclear Generating Station

Ron CHATTERTON, Ontario Power Generation Inc.

Evaluating Nuclear Power Plant Crew Performance During Emergency Response Drills

Doron RABIN, Atomic Energy Control Board

Psychological Error Mechanisms

Bryan K. PATTERSON, Human Factors Practical,
M. BRADLEY, University of New Brunswick
& L. JEFFERY, Biron Engineering (International) Inc.

The Professional Development Culture and Performance Improvement

C. Keith SCOTT, Atlantic Nuclear Services Ltd

SESSION C2:
SAFETY & LICENSING

MAPLE Research Reactor Safety Margins Uncertainty Assessment Methodology
H. E. SILLS, R. B. DUFFEY & T. H. ANDRES,
Atomic Energy of Canada Limited

Fission-Product Transport and Retention in the PHTS Under Accident Conditions
Lawrence W. DICKSON & Raymond S. DICKSON,
Atomic Energy of Canada Limited

Computer Simulation of Aerosol Dynamics with a Unified Agglomeration Kernel
Y. B. TRUDEAU, Wen Chao CHEN, ANIQ,
C. Keith SCOTT, Atlantic Nuclear Services Limited
& K. OXORN, ANIQ

Implementation of Common Industry Safety Analysis Codes
J. LUXAT, Ontario Power Generation Inc.,
V. G. SNELL, Atomic Energy of Canada Limited,
M.-A. PETRILLI, Hydro-Québec
& P. D. THOMPSON, New Brunswick Power

Graphical Environment Pathway Analysis Software TEDII-60 Incorporating ICRP-60 Recommendations
Sang-Ho KANG & Kyung-Hee LEE, Korea Power Engineering Company Inc.

Regulatory Considerations of Lay-Up of Power Reactors
Patrick G. HAWLEY, Atomic Energy Control Board

SESSION C3:
REACTOR PHYSICS 3

Comparison of MCNP4B and WIMS-AECL Calculations of Coolant-Void-Reactivity Effects for Uniform Lattices of CANDU Fuel

Kenneth S. KOZIER,
Atomic Energy of Canada Limited

Verification of Two-Group CERBERUS for a Loss-of-Coolant Analysis in a Simplified Reactor Model

James V. DONNELLY & E. M. NICHITA, Atomic Energy of Canada Limited

The Improved Quasistatic Method vs the Direct Method: A Case Study for CANDU Reactor Transients

Siamak KAVEH, Jean KOCLAS & Robert ROY,
École Polytechnique de Montréal, Dépt. de génie mécanique, Institut de génie nucléaire

Simulation of CANDU Reactor Transients Using Three Level Space Time Kinetics

Siamak KAVEH, Jean KOCLAS & Robert ROY,
École Polytechnique de Montréal, Dépt. de génie mécanique, Institut de génie nucléaire

3D Computer Visualization and Animation of CANDU Reactor Core

T. QIAN, M. ECHLIN, P. TONNER & B. SUR ,
Atomic Energy of Canada Limited

Fusion Research's Demise in Canada - Another Avro-Arrow ?

Richard A. BOLTON, Retired

SESSION C4:
Q.A., REGULATORY & WASTE MANAGEMENT

Instrument Development for Safeguards Implementation on Spent CANDU Fuels in Korea

Young-Gil LEE, Hong-Ryul CHA, Won Woo NA & Wan Ki YOON,
Korea Atomic Energy Research Institute

Waste Management Study for the Disposition of Spent Uranium-Metal Fuel from the Democratic People's Republic of Korea (DPRK)

Michael M. ATTAS, Y. ATES, P. BAUMGARTNER, J. GARRONI, L. JOHNSON , R. LESCO & J. TAIT,
Atomic Energy of Canada Limited

Quality Assurance Implementation and Effectiveness for CANDU 9 Program

J. HUTERER,
Atomic Energy of Canada Limited

Three Mile Island Litigation 20 Years Later: Any Lessons for Canadian Utilities?

Martin REESINK,
Ottawa University , Law Department

The Y2K Program for Scientific-Analysis Computer Programs at AECL

Jad POPOVIC, Cheryl GAVER & Dawn CHAPMAN,
Atomic Energy of Canada Limited