Wednesday, October 15, 2003 Track A

#	Day	When	Author(s)	Affiliation	Title
		10:00			Registration Starts & Exhibits Open
		11:45 – 1:15			Lunch & Conference Start
03A1	Wednesday	1:30 - 2:15	Sebouh Ohanian Rainer Kurz	Solar Turbines Inc.	Transient Simulation of the Effects of Compressor Outage
					The transient effects of compressor shutdowns are discussed for both series and parallel configurations. Differences between the configurations are also discussed.
03A2	Wednesday	2:15 - 3:00	Rainer Kurz Sebouh Ohanian	Solar Turbines Inc.	Modeling Turbomachinery in Pipeline Simulations
					The modeling of turbo machinery is discussed. The impact on compressor and turbine performance due to different operating requirements, site elevations, gas and ambient temperatures are explored. Typical turbo machinery modeling problems encountered with a variety of commercial simulation programs are also discussed.
		3:00 - 3:30			Break
03A3	Wednesday	3:30 - 4:15	Kirby S. Chapman, Mohammad Abbaspour	NGML, Kansas State University	Non-isothermal Compressor Station Transient Modeling
					Modeling of compressors as non-isothermal, unsteady, one- dimensional compressible flow using a fully implicit finite difference solution method is discussed.
03A4	Wednesday	4:15 - 5:00	Sidney Pereira dos Santos Eduardo Saliby	Petrobras Coppead/UFRJ	Compression Service Contract - When is it Worth It?
					This paper discusses the use of compression service contracts as an alternative for conventional and permanent compressor stations. The use of the Monte Carlo simulation method and study results are reviewed.
		6:00 - 7:30			Reception

Wednesday, October 15, 2003 <u>Track B</u>

#	Day	When	Author(s)	Affiliation	Title
		10:00			Registration Starts & Exhibits Open
		11:45 – 1:15			Lunch & Conference Start
03B1	Wednesday	1:30 - 2:15	Ronny Albrechtsen Elling Sletfjerding	Statoil	Full-scale Multiphase Flow Tests in the Troll pipelines
					This paper focuses on the design and performance of a full scale multiphase flow test program for a gas condensate pipeline that connects a wellhead platform to a processing plant.
03B2	Wednesday	2:15 - 3:00	Saeid Mokhatab	Tehran Unviersity	Explicit Method Predicts Temperature and Pressure Profiles of Gas-Condensate Transmission Pipelines
					This paper presents simple equations for predicting temperature and pressure changes for two-phase flow pipelines.
		3:00 - 3:30			Break
03B3	Wednesday	3:30 - 4:15	S. Gaard and O. T. Isaksen	Statoil	Experiments with Various Drag Reducing Additives in Turbulent Flow in Dense Phase Gas Pipelines
					This paper reviews various drag reducing additives and their potential use in long distance dense phase gas transmission pipelines to increase flow capacity.
03B4	Wednesday	4:15 - 5:00	T. S. Golczynski	Multiphase Solutions, Inc.	Defining Operating Envelopes for Multiphase Pipelines – A Flow Assurance Approach
					The operating envelope and operability at less than maximum flows for new multi-phase pipelines are discussed.
		6:00 - 7:30			Reception

Thursday, October 16, 2003

		8:00 - 8:45			Preliminaries
0301	Thursday	8:45 - 9:30	Gerhard Geiger Thomas Werner Drago Matko	University of Applied Sciences Gelsenkirchen University of Ljubljana	Leak detection and Localization – A Survey
					A leak detection system survey addresses the regulatory framework, an overview of leak detection systems, the field tests of a model based leak detection system, and future work.
0302	Thursday	9:30 - 10:15	Jason Modisette Jerry Modisette	Energy Solutions International Consultant	Pipeline Flow Physics
					A tutorial on how the conservation laws of mass, momentum, and energy affect fluid flow in pipes. Numerical demonstrations are provided. Discussion includes forces on the fluid element and pipe wall, energy transfer, frictional force, Joule-Thompson effect, and heat conduction. Single phase gas and liquid pipe flow are covered.
		10:15 - 10:30			Break
0303	Thursday	10:30 - 11:15	Servan Le Guern, Emmanuel Givois, Patrick Ancel	Gaz de France	Dynamic Simulation for Determining Gas Quality in the Context of New Regulatory Constraints
					This dynamic simulation method is undergoing testing to determine the its accuracy in determining gas quality at delivery points. Results obtained at several parts of the gas network will be presented.
0304	Thursday	11:15 - 12:00	Per Lagoni	Energy Solutions International	The Challenge of Sharing More than Information / How to Make Useful and Cost Effective Application Software
					This paper discusses the use of information from pipeline simulation models by departments and personnel without modeling experience. Discussion will include how different users of pipeline simulation information need to cooperate to make the model capable of providing the results required.
		12:00 - 1:15			Lunch
0305	Thursday	1:15 – 2:00	T.R.V Krishnan, Jason Modisette, K.V. Siva Rao K.M.Bansal, K.K.Jain	Energy Solutions International Indian Oil Corporation	A Crude Scheduling Package for an Indian Cross Country Crude Pipeline
			K.wi.Dalisal, K.K.Jalli	Ltd.	
					This paper discusses a crude oil scheduling optimization package that generates feasible batch plans per refinery based on batch formation, minimum tanker detention, and minimum transportation and inventory

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			costs.
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0306	Thursday	2:00 - 2:45	Richard Carter Henry Rachford	Advantica	Optimizing Line-Pack Management to Hedge against Future Load Uncertainty
					This paper discusses optimizing line pack management to meet a range of potential future load patterns. Examples of this "hedging" strategy for several scenarios are presented.
		2:45 – 3:15			Chairman's Session
		3:15 - 3:30			Break
0307	Thursday	3:30 - 4:15	Tom van der Hoeven	N.V. Nederlandse Gasunie	Constrained Network Simulation
					This paper will be a demonstration of the simulator that is used for networks with gas quality constraints. The simulator uses maximum and minimum values rather than single set points for flows and pressures to make modeling easier.
0308	Thursday	4:15 - 5:00	My-Linh Laud Ram Wallooppillai	El Paso	Planning for Power: Pipeline Design for Natural Gas Fired Power Plants
					This paper discusses transient pipeline simulations to design incremental pipeline facilities to meet the unique demand requirements of gas-fired power plants. Case studies, facility alternatives, and precedent agreements will be reviewed.
		6:00 - 7:30			Reception

Friday, October 17, 2003

		8:30			Start
0309	Friday	8:30 - 9:15	Susan Bachman	Enterprise Products	Steady State – Is The Solution Realistic For The Piping
			Mary Goodreau	Advantica	Network?
					This paper discusses the risks of assuming a steady state
					solution is realistic. Case studies present possible pitfalls such
					as unrealistic equipment operation, violation of hydraulic
					constraints, and unrealistic line pack distribution. Steps used to
					determine the feasibility of solutions will be discussed and a
0.21.0		0.15 10.00			checklist to ensure viable simulation results will be presented.
0310	Friday	9:15 - 10:00	J.L. Piggott	Advantica	Accurate Load Forecasting – "You cannot be serious"
					The load forecasting process and factors that affect forecasting
					accuracy are discussed. The paper describes how to work
					around some inaccuracies. Examples of real data are described
		10.00 10.20			and with the expected forecasting accuracy using such data.
		10:00 - 10:30			Break
0311	Friday	10:30 - 11:15	Ken Mah, P.Eng.	TransCanada PipeLines	Application of an Expert System for Rapid Linebreak Detection
			John Kmet, M.Sc.		and Other Events
					This paper describes a new approach to provide advanced
					advisory information to Gas Controllers. Discussion includes
					advisory information to Gas Controllers. Discussion includes system requirements, integration with SCADA and on-line
0010	2.1				advisory information to Gas Controllers. Discussion includes system requirements, integration with SCADA and on-line simulations, conclusions, cost savings, and future directions.
0312	Friday	11:15 - 12:00	Milan Tirpak, Anton	SPP- Division	advisory information to Gas Controllers. Discussion includes system requirements, integration with SCADA and on-line simulations, conclusions, cost savings, and future directions. Experiences with real time systems and their contribution to safe
0312	Friday	11:15 - 12:00	Milan Tirpak, Anton Heringh, Jan Marko	SPP- Division Slovtransgaz	advisory information to Gas Controllers. Discussion includes system requirements, integration with SCADA and on-line simulations, conclusions, cost savings, and future directions.
0312	Friday	11:15 - 12:00			advisory information to Gas Controllers. Discussion includes system requirements, integration with SCADA and on-line simulations, conclusions, cost savings, and future directions. Experiences with real time systems and their contribution to safe and efficient control of gas transport system This paper discusses the advantages and limitations of the real
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