Agenda for 2005 Conference

Monday, November 7, 2005

#	Day	When	Author(s)	Affiliation	Title
		8:00 – 9:00			**Pipeline Simulation Solutions Providers Breakfast**
		10:00			**Registration Starts & Exhibits Open**
		11:30 – 12:30			**Lunch & Conference Start**
		12:00 – 12:30			Key Note Address
		12:30 – 1:15			Pipeline Simulation Solutions Providers Commercial Session
05A1	Monday	1:30 – 2:15	Ed Nicholas Philip Carpenter Morgan Henrie	Nicholas Simulation Services Serrano Services and Systems MH Consulting, Inc.	Accurately Representing Leak Detection Capability and Determining Risk The paper provides a description of a software-based methodology to provide comprehensive performance mapping of CPM systems that are accurate for low leak detection rates. The resulting description of leak detection system performance addresses the probabilistic nature of detectability at low leak rates as well as issues related to false positives. The discussion also investigates implications for surveillance alternatives as well as procedural management of CPM system alarms for low leak sizes.
05A2	Monday	2:25 – 3:10	Kevin Webb Jon Barley	Energy Solutions International	Selecting an Effective Leak Detection Strategy In today's dynamic technical, business and regulatory environment an effective leak detection system is no longer discretionary. Unfortunately with the combination of existing assets, risk profiles and commodities being transported, one size system fits none. A successful strategy must combine appropriate technology with the organizational and business strengths of the pipeline company. In this presentation a methodology will be discussed that exposes the available technology options to the key operations and business decision makers in such a way as to facilitate a best choice. Matching the requirements of a particular pipeline to the expectations of its multiple stakeholders is central to providing a sustainable and effective leak detection system
		3:10 – 3:30			**Break**
05A3	Monday	3:30 – 4:15	Galen Stanley	Telvent	Sensitivity study for leak detection in slack line conditions Improvements in modeling, in conjunction with more stringent requirements, results in a continually closing gap between what is practical and what is possible. This is no more evident than in slack line leak detection.

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					Using two real world pipelines that encounter various slack conditions, this paper will explore the effects that are important in determining leak thresholds in slack line conditions.
05A4	Monday	4:25 – 5:10	Dr. Marian Dudek	TTC	Liquid leak detection focused on theft protection The paper discusses the typical properties of pipeline leaks caused by theft, documented on data from various pipeline operators. The presentation will discuss the requirements put on instruments, telemetry, SCADA, GIS and leak detection and suggest the standards. The data trends, drawings and video documentary will be provided.
		6:00 – 7:30			**Reception**
05B1	Monday	1:30 – 2:15	Jackeline Cordova Andres Mendizábal Morten Kristiansen René Varón Soren Hvidbjerg	Oleoducto de Crudos Pesados Energy Solutions International	Training tools to evaluate pipeline operator performance and to validate pipeline operational procedures At installations like OCP in Ecuador, where the pipeline crosses high sensitivity areas, including the Amazon Jungle and the Andean mountains, the pipeline operators are subject to extreme pressure by environmental and government agencies to guarantee safe operation of the line. The particular situation of OCP, being a brand new pipeline, made the implementation of a training program a very demanding project, including the selection, development and implementation of the tools to train and then evaluate operators' performance on a line that was not yet in operation. The main objective of this paper is to present the process that OCP established to implement the training application, to train and evaluate operator performance on a completely new installation and how they gained confidence in this application to become their daily assistance tool to double check operational procedures and new strategies to run their pipeline.
05B2	Monday	2:25 – 3:10	Martin Althoff Guenter Wagner Peter Aymanns	LIWACOM Stadtwerke Duesseldorf AG	Training Control Room Staff from Local Distribution Companies The paper discusses the reasons for local distribution companies to enter into a qualification program for the control room personnel. It also outlines the experiences made during

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					more than 1 year of training courses, including data collection, network modeling and the preparation of a simulator environment, which provides a user friendly interface for the trainees.
		3:10 – 3:30			**Break**
05B3	Monday	3:30 – 4:15	Dr. David Basnett, John Lewis	Atmos International, Inc.	Simulating pipeline control systems for operator training This paper describes the addition of a control simulation system to a hydraulic pipeline model to allow it to be used for training pipeline operators. The presentation will include the architecture and logic of the control simulation, integration with the pipeline model, and examples of the graphical editing and control interface. Potential drawbacks of the chosen method will also be considered.
05B4	Monday	4:25 – 5:10	William H. Bosler, P.E. Gary A. Rathwell, P.E., Ing.	SLP Russia	Advantages of OPC DA Interfaces for Pipeline Simulation, Component Testing, and Operator Certification Integration of Pipeline Nominations, Planning, Maintenance, Dispatch, and Engineering has been very challenging to create let alone sustain. Fortunately, Operating and Vendor Independent Standards for Integration are maturing and being widely adopted. This paper discusses data integration for all aspects of Pipeline Nominations, Planning, Maintenance, Dispatch, and Engineering.
		6:00 – 7:30			**Reception & Exhibits Open**

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Tuesday, November 8, 2005

		8:00 – 8:30			**Conference Start**
0501	Tuesday	8:30 – 9:15	Håvard Eidsmoen Ian Roberts Jose Alana	Scandpower Petroleum Technology Inc.	Issues relating to proper modeling of the profile of long gas condensate pipelines The paper discusses important elements in the modeling of long gas condensate pipelines, both for steady state and dynamic operations, with an emphasis on liquid handling during rate changes and pigging operations. The presentation will through a development example, illustrate different aspects of pipeline modeling, show sensitivities to different parameters and demonstrate how this influences the design of the pipeline and associated systems.
0502	Tuesday	9:15 – 10:00	J. Stoffregen K.K. Botros D.J. Sennhauser K. Jungowski, H. Golshan	TransCanada PipeLines Limited NOVA Research & Technology Corporation	Pipeline Network Optimization – Application of genetic Algorithm Methodologies Evaluation of the available optimization techniques for a large pipeline network has led TransCanada to evaluate and pursue the use of genetic algorithm (GA) methodologies. The paper will explain why GA is the methodology of choice, present the technical and practical issues associated with GA methodologies, and provide some insight into dealing with these issues and maximizing the business benefit.
		10:00 – 10:30			**Break**
0503	Tuesday	10:30 – 11:15	Karl Baumann Ronny Albrechtsen Morten Carlsen Frode Rømo Lars Bjarne Røvang	Statoil Gassco Sintef QPC	Transport analysis of the dry gas network system on the Norwegian Continental Shelf using a network optimization tool This paper gives a description of the network optimization tool GassOpt, with focus on the various usages of the program. Several cases from the dry gas network system at the Norwegian Continental Shelf will be presented and discussed in the paper
0504	Tuesday	11:15 – 12:00	Déaglán Healy Paul Dickerson	Bord Gáis Éireann Energy Solutions International	A case study of how transient analysis facilitates asset optimisation This paper demonstrates how using transient analysis, rather than simply adopting a steady state approach, facilitates the identification of additional capacity within an urban transmission network. The presentation will illustrate how a transient model of Dublin City was developed and how, as a result of this, additional Power Generation demand was

					accommodated on the network.
		12:00 – 1:15			**Lunch**
0505	Tuesday	1:15 – 2:00	L.I. Langelandsvik W. Postvoll P. Svendsen J.M. Overli T. Ytrehus	Polytec Gassco NTNU	An Evaluation of the Friction Factor Formula based on Operational Data The paper shows how operational data from real gas transport pipelines have been used to gain insight in the friction factor correlation that is used in a commercially available pipeline simulation tool. The results indicate that the known correlations may be improved. It also discusses some consequences of using an incorrect correlation.
0506	Tuesday	2:00 – 2:45	Fernando J. Pillon Facundo H. Cocco Christian D. Romano	T.G.N. S.A ENARGAS SENER S.A.	NATURAL GAS COMPRESSION STATIONS Compressors out of service distribution function. Analysis and evaluation This paper discusses compressing equipment failure probability distribution and the time between failures. This probability distribution could be useful to study the impact on environment, planning, maintenance resources management and to evaluate different operation states. This work shows the way to obtain machine failure probability distribution and a model to predict operating compressor out of service. An example of the use of the model will be explained.
		2:45 – 3:15			**Chairman's Session**
		3:15 – 3:45			**Break**
0507	Tuesday	3:45 – 4:30	Mary Goodreau Ed Nicholas	Advantica Nicholas Simulation Services	Data Standards – A Progress Report The committee has completed several pieces of the data standards. These include description of XPSL language guidelines, configuration objects, and output objects. The committee wants to discuss the strategy of XPSL and its intended uses. These standards have been published and are ready to be accepted by the membership
0508	Tuesday	4:30 – 5:15	Barry Authers Richard Drew	Advantica	Implementation of an Automated Predictive On-line Simulation Decision Support Tool This paper describes an automated decision support tool, utilising a system state estimate and shipper nominations to simulate the operation of the system for up to the next 48 hours. It is used to ensure the system remains balanced and that user intervention is only required to initiate balancing and interruption actions. The paper will discuss the the key inputs used in the iterative predictive simulation process, its

					use and implementation within Gas Control, and the business benefits seen by Premier Transmission Ltd.
		6:00 – 7:30			**Reception**

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Wednesday, November 9, 2005

		8:30			**Start**
0509	Wednesday	8:30 – 9:15	Marco Hoogwerf	N.V. Nederlandse Gasunie	Capacity planning of transfer-stations This paper presents an optimization model which calculates the capacity of the Dutch custody transfer stations, in which failure and overloading of equipment is taken into account. The model is dealing with thermo-dynamics and is considered as an isenthalpic process. The presentation will discuss the mathematical approach and its use by the planning department.
0510	Wednesday	9:15 – 10:00	Leandro Bastos Machado Marcos José Moraes da Silva	Petrobras	Conciliating supply and delivery contractual conditions on the transport system design This paper discusses the impact of supply and delivery contractual conditions in the design phase of a pipeline system and evaluates the current practice of using steady state load factor in the economic evaluation phase of the alternative pipeline configurations.
		10:00 – 10:30			**Break**
0511	Wednesday	10:30 – 11:15	Bob Pace, Nancy Gilmore	Pacific Gas & Electric Company	Projection of GIS-Based Load Growth Applied to Local Transmission System Models This paper discusses a methodology developed by Pacific Gas & Electric engineers that optimizes capital investments by applying future projected load growth to small geographic zones. Utilization of detailed GIS-based growth information and translation of this growth information's coordinate system into gas system models will be presented and demonstrated.
0512	Wednesday	11:15 – 12:00	Mike Bryant Ron Dodson Søren Hvidbjerg	Florida Gas Transmission Energy Solutions International	Expert Alarm System The Expert Alarm System creates alarms that are produced from SCADA data, real-time model data, and logic diagrams. These alarms are sent directly to the Gas Control SCADA alarm page to assist the gas controller in making operational decisions. The paper will review examples of the alarms, the implementation/integration of these systems, and a review of the FGT models.
		12:00			**Conference Close**