

Tuesday Agenda - May 15, 2012

<i>Paper</i>	<i>Time</i>	<i>Event or Paper Title/Author/Description</i>
	05:00 PM - 06:30 PM	Registration Open Registration table open for conference registration, conference check-in and receipt of conference materials.
	05:00 PM - 07:30 PM	Exhibit Table Setup Exhibitors are given this opportunity to set up their displays and demonstration equipment in the main conference room. Although there will not be an opportunity to exhibit during the setup time, timely set-up will allow vendors to take full advantage of the exhibit times throughout the conference.
	06:00 PM - 07:30 PM	Ice-Breaker Reception For those arriving on Tuesday, mix and mingle with other conference attendees in a relaxed setting. Catch up with old friends and meet new ones. Drinks and snacks provided. Complimentary for registered conference attendees and their guests.

Wednesday Agenda - May 16, 2012

<i>Paper</i>	<i>Time</i>	<i>Event or Paper Title/Author/Description</i>
	07:30 AM - 08:30 AM	Registration Open Registration table open for conference registration, conference check-in and receipt of conference materials.
	07:30 AM - 08:30 AM	Exhibits Open Pipeline Simulation Solution Providers will be available to discuss and demonstrate their products and services.
	07:30 AM - 08:30 AM	Presenter Orientation Meeting Meeting between Presenters and a PSIG Director to be held in the same conference room as their presentation. This is to familiarize the speaker with the amenities in the room, presentation equipment available and PSIG presentation guidelines.
	08:30 AM - 11:45 AM	Technology Showcase We ask each solution provider to present a pipeline leak problem to the PSIG membership. The problem can be one or more of Leak Detection, Leak Location and Sizing, and Remediation. This showcase is open to gas, liquid and multi-phase software solutions.
	08:30 AM - 09:15 AM	Technology Showcase - ATMOS International
	09:15 AM - 10:00 AM	Technology Showcase - Bradley B Bean, PE
	10:00 AM - 10:15 AM	Break & Exhibits Open Visit with the Pipeline Simulation Solution Providers to see the latest in pipeline simulation technology.
	10:15 AM - 11:00 AM	Technology Showcase - Energy Solutions International
	11:00 AM - 11:45 AM	Technology Showcase - LIWACOM
	11:45 AM - 01:30 PM	Exhibits Open Pipeline Simulation Solution Providers will be available to discuss and demonstrate their products and services.
	11:45 AM - 01:30 PM	Lunch, Conference Welcome & Solution Provider Introductions There will be a short Welcome Address followed by the Pipeline Simulation Solution Providers who will introduce themselves and briefly describe their products and services. Lunch is complimentary for registered conference attendees.
	01:00 PM - 01:30 PM	Presenter Orientation Meeting Meeting between Presenters and a PSIG Director to be held in the same conference room as their presentation. This is to familiarize the speaker with the amenities in the room, presentation equipment available and PSIG presentation guidelines.

Wednesday Agenda - May 16, 2012

Paper	Time	Event or Paper Title/Author/Description
1204	04:00 PM - 04:45 PM	<p>Evaluating Steady-State Versus Transient Modeling in the Design of a Vent Gas Header in a Natural Gas Compression Facility</p> <p>Dan Garwood Chesapeake Energy Doug Kolak Mentor Graphics Mechanical Analysis Division (formerly Arlie Nuetzel Mentor Graphics Mechanical Analysis Division (formerly</p> <p>This study compares two natural gas compressor facility vent header designs—one designed with steady-state calculations and one designed with a transient analysis. The steady-state design is also evaluated with the transient software to determine how the design might perform in an emergency. The example facility used for this study is based on an operating compressor facility in the Barnett Shale area near Ft. Worth, TX. It includes 8 automated block valves, 16 pressure relief valves, and the piping that connects it to the blow down silencer. The predicted venting performance for each design is also compared to the actual venting performance at the example facility.</p>
1208	04:00 PM - 04:45 PM	<p>Computing and Optimizing the Available Linepack in a Gas Network to Address the Issue of Flexibility</p> <p>Baptiste Rossi GDF SUEZ Benoît Casoetto GDF SUEZ Arthur Jacquiau GDF SUEZ Aurélie Le Maître GDF SUEZ Nadjim Moumini GRTgaz</p> <p>This paper discusses the optimization of linepack usage in gas networks to match flexibility demands in consumption. The rapid development of flexible gas plants known as CCGT makes it a key issue in computing capacities for TSOs. Operating principles of tools designed by GDF SUEZ R&I to address this subject will be presented, highlighting the respective roles of steady-state- and transient-modeling in that task. Illustrations based on results for GRTgaz network will be given.</p>
	04:00 PM - 07:00 PM	<p>Exhibits Open</p> <p>Pipeline Simulation Solution Providers will be available to discuss and demonstrate their products and services.</p>

Thursday Agenda - May 17, 2012

<i>Paper</i>	<i>Time</i>	<i>Event or Paper Title/Author/Description</i>
	07:30 AM - 08:30 AM	<p>Registration Open</p> <p>Registration table open for conference registration, conference check-in and receipt of conference materials.</p>
	07:30 AM - 08:30 AM	<p>Exhibits Open</p> <p>Pipeline Simulation Solution Providers will be available to discuss and demonstrate their products and services.</p>
	08:00 AM - 08:30 AM	<p>Presenter Orientation Meeting</p> <p>Meeting between Presenters of General Session Papers and a PSIG Director to be held in the same conference room as their presentation. This is to familiarize the speaker with the amenities in the room, presentation equipment available and PSIG presentation guidelines.</p>
	08:30 AM -	<p>Conference General Session</p> <p>Start of Thursday Conference General Session</p>
1209	08:30 AM - 09:15 AM	<p>An Innovative Approach to Gas Transport Planning - A Dutch Transmission System Operator Experience Piet Nienhuis NV Nederlandse Gasunie</p> <p>The paper describes a highly meshed gas transmission system where entry and exit capacity is sold decoupled, independent from each other. This requires a new approach in planning method and also a new design of a planning tool that can be used to calculate (both for simulation and optimization) many highly different flow patterns.</p>
1210	09:15 AM - 10:00 AM	<p>Lessons, Issues, and Perils Experienced During the Conceptual Design and Predictive Modeling of an Ethane Pipeline Gregory Lind Enterprise Products Pipeline Susan Bachman Enterprise Products Pipeline</p> <p>Our company recently subscribed to transport 190,000 bpd of ethane over 1200+ miles via new and existing pipelines. The existing pipeline that is to be repurposed for this project was originally designed for gasoline, jet fuel, diesel, and propane. This paper will discuss the design process, including ethane properties, pipeline conversion constraints, as well as the importance in convincing engineers, commercial personal and management that ethane is not your typical NGL.</p>
	10:00 AM - 10:15 AM	<p>Conference Break & Exhibits Open</p> <p>Visit with the Pipeline Simulation Solution Providers to see the latest in pipeline simulation technology.</p>
1211	10:15 AM - 11:00 AM	<p>Pipeline Safety Enhancement Plan Impacts on Gas System Planning Rick Brown Pacific Gas and Electric Company</p> <p>This paper discusses the impacts of the California Pipeline Safety Enhancement Plan (PSEP) on gas system planning. The paper will discuss the very large workload and increases in gas system hydraulic analyses complexity, and how this is expected to change the software functionality needs of pipeline simulation. The paper will help provide an overview of how an increased focus nationwide in pipeline safety can affect gas system planning departments.</p>
1212	11:00 AM - 11:45 AM	<p>Tuning of Subsea Pipeline Models to Optimize Simulation Accuracy Garry Hanmer ATMOS International Edward Jackson ATMOS International Dagfinn Hansen GASSCO Sven Erik Losnegardn GASSCO Ben Velde GASSCO</p> <p>This paper discusses the optimisation of simulation accuracy for subsea pipeline models through the automated tuning of pipeline parameters such as pipe roughness and heat transfer coefficient. The presentation will discuss the tuning procedure for optimum model accuracy and the minimisation of measurement errors through maximum likelihood state estimation.</p>

Thursday Agenda - May 17, 2012

<i>Paper</i>	<i>Time</i>	<i>Event or Paper Title/Author/Description</i>
	11:45 AM - 01:30 PM	<p>Lunch & Chairman's Session</p> <p>The PSIG Chairman will conduct a short business meeting to discuss: results of last years' evaluation sheets, officer elections, future conference locations, best paper awards, special announcements and other topics of interest. Lunch is complimentary for registered conference attendees.</p>
	11:45 AM - 01:30 PM	<p>Exhibits Open</p> <p>Pipeline Simulation Solution Providers will be available to discuss and demonstrate their products and services.</p>
1213	01:30 PM - 02:15 PM	<p>Thermal Decoupling: An Investigation</p> <p>Jon Barley Energy Solutions International</p> <p>pipe compromises are often made to offset computational complexity and performance against accuracy. This paper discusses in detail one such compromise that is often made when it comes to solving the thermal equation: decoupling the thermal solution from the hydraulic solution. Both fully coupled and decoupled solutions are derived, results compared and conclusions made regarding computational expense verses accuracy.</p>
1214	02:15 PM - 03:00 PM	<p>Simulation of Stratified Gas-Liquid Flow in Near-Horizontal Pipes</p> <p>B. Calgaro University of Pisa M. Bonizzi TEASistemi P. Ciandri TEASistemi M. Margarone ENI E&P I.R. Ellul Knowledge Reservoir</p> <p>In this paper, we use different data sets relative to stratified gas-liquid flow in near horizontal pipes to test major commercial codes used for pipeline simulation. Among these data we include a new set of measurements of pressure drops and liquid hold-up taken at TEASistemi Laboratory in Pisa, Italy.</p>
	03:00 PM - 03:15 PM	<p>Conference Break & Exhibits Open</p> <p>Visit with the Pipeline Simulation Solution Providers to see the latest in pipeline simulation technology.</p>
1215	03:15 PM - 04:00 PM	<p>Instability in Finite Difference Pipeline Models</p> <p>Jason P. Modisette Atmos International</p> <p>This paper explores the situations where numerical instability arises in different types of finite difference pipeline model and what can be done to avoid it. Explicit, fully implicit, and partially implicit models of liquid and gas pipelines are considered. The effect on stability of the method of linearization of the underlying nonlinear partial differential equations will also be discussed.</p>
1216	04:00 PM - 04:45 PM	<p>Throughput maximization and verification for batched liquid pipelines</p> <p>Matthew H. Ford Telvent Galen Stanley Telvent</p> <p>In this paper we describe the methodology behind, and potential uses of a hydraulically accurate pipeline throughput maximizer. Such a system will allow pipeline engineers to calculate their needed equipment line up weeks in advance, while verifying batch schedules while handling both planned and unplanned outages. Similarly, it will discuss how such a system would be capable of verifying whether a planned batch line up was feasible given known outages, pipe flow derates, and potential unplanned shutdowns.</p>
	04:45 PM - 06:00 PM	<p>Exhibits Open</p> <p>Pipeline Simulation Solution Providers will be available to discuss and demonstrate their products and services.</p>
	06:00 PM - 07:30 PM	<p>Evening Reception</p> <p>Mix and mingle with other conference attendees. Catch up with old friends and meet new ones. This is the slightly more formal of the two evening receptions. Appetizers and drinks provided. Complimentary for registered conference attendees and their guests.</p>

Friday Agenda - May 18, 2012

<i>Paper</i>	<i>Time</i>	<i>Event or Paper Title/Author/Description</i>
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01:00 PM -

Golf Event

For an additional fee, attendees may participate in a golf outing. Additional information is provided on the PSIG web site. Contact golf coordinator, Jim Keiler if interested in participating.