CONFERENCE PROGRAM

Tuesday, February 18

5:00 – 7:00pm	Exhibition welcome reception sponsored by ROSEN Group

Wednesday, February 19

6:45 – 7:45am	Breakfast - Marriott Marquis, Level 2

	1.0 Plenary opening session **Chair: George Williamson, BP, Houston, TX, USA**
8:00am	Opening remarks
8:15am	**[1] Utilization of vendor auditing for continuous improvement of ILI system performance** *Karl Augustus, Juan Martinez, Colonial Pipeline Co., Alpharetta, GA; John Godfrey, Tara Podnar McMahan, DNV GL, Dublin, OH, USA*
8:45am	**Young Pipeline Professionals Annual Recognition Award presentations**
9:00am	**[2] Beyond compliance…** *Jan Frowijn and Chris Yoxall, ROSEN USA, Houston, TX, USA*
9:30am	**[3] The genesis and applications of API Standard 1163, 'Inline Inspection Systems Qualification Standard'** *Bryan Melan, Tide Water Integrity Services LLC, Georgetown, TX, USA*
10:00am	**Refreshment break**
11:00am	**[4] A process for hydrostatic test data acquisition and validation** *Gary Zunkel, Bluefin, Ames, IA, USA*
11:30ama	**[5] A review of nondestructive technologies and statistics-driven approaches for estimating toughness** *Dr John Kiefner, Michael Rosenfeld, Adam Steiner, RSI Pipeline Solutions, New Albany, OH; Troy Rovella, PG&E, San Ramon, CA; and Dr Peter Veloo, Exponent, Los Angeles, CA, USA*
12:00pm	**[6] Pig and dig: how much is enough, how much is too much?** *Joel Anderson, Enable Midstream Partners, Oklahoma City, OK; W. Kent Muhlbauer, WKM Consultancy, Austin, TX; Justin Raimondi, **New Century Software**, Fort Collins, CO, USA*
12:30pm	**Lunch sponsored by Enduro**

	2.1 Cracks **Chair: Tom Bubenik, DNV GL, Dublin, OH, USA**	**3.1 ILI applications** **Chair: Dr Mike Kirkwood, T.D. Williamson, Dubai, UAE**	**4.1 Machine learning** **Chair: Trevor McFarlane, Dynamic Risk, Calgary, AB, Canada**
2:00pm	**[7] Black swans, red herrings and sacred cows: the zoology of pipeline cracks** *Dr Ted Anderson, TL Anderson Consulting, Longmont, CO, USA*	**[30] Calculation of a laser-scan-like 3D defect profile from conventional MFL data** *Johannes Palmer and Andrey Danilov, ROSEN Group, Berlin, Germany; Chris Yoxall, ROSEN USA, Houston, TX, USA*	**[53] Risk-based decision-making supported by machine learning** *Michael Gloven, Expert Infrastructure Solutions (EIS), Denver, CO, USA*
2:30pm	**[8] Next generation ILI crack inspection service – an operator vendor collaboration for a 26-inch pipeline** *Rogelio Guajardo Rodriguez, Dr Michael Haas, Dr Thomas Hennig, Thorsten Sickinger, NDT Global, Stutensee, Germany; Steven Bott, Owen Burdek, Mike Hill, Rob MacKenzie, Enbridge Pipelines, Edmonton, AB, Canada*	**[31] A case study – benefit of pipeline specific sizing for engineering criticality assessment** *Genevieve Stilwell, Enbridge, Houston, TX, USA; Holger Charbon, Stephan Tappert, Baker Hughes, Stutensee, Germany*	**[54] The current progeny of inline inspection machine learning** *Dane Burden, Paul Dalfonso, TD Williamson, Salt Lake City, UT; Adrian Belanger, TD Williamson, Houston, TX, USA*

3:00pm	**[9] Measuring fatigue crack growth rates of pipeline steels and their implications to fatigue analysis** *Jacob Bradford, Sergio Limon, Elevara Partners, Salt Lake City, UT; Jim Harter, Alex Litvinov, LexTech, Centerville, OH, USA*	**[32] Replacing hydrotesting of low frequency ERW pipe with an enhanced ILI solution – Eclipse** *Dr Thomas Hennig, Rogelio Guajardo Rodriguez, NDT Global, Stutensee, Germany; Marcus Le Roy, Marathon Pipelines, Findlay, OH; Miguel Santiago Urrea, NDT Global Inc, Houston, TX, USA*	**[55] Machine learning to support risk and integrity management** *Christopher De Leon and Michael Smith, ROSEN USA, Houston, TX, USA*
3:30pm	**Refreshment break sponsored by Halfwave**		
	2.2 Cracks (cont'd) **Chair: Tara McMahan, DNV GL, Dublin, OH, USA**	**3.2 ILI applications (cont'd)** **Chair: Roland Palmer-Jones, ROSEN Group, Newcastle, UK**	**5.1 Data management & leveraging** **Chair: Bryan Melan, Tide Water Integrity Services LLC, Georgetown, TX, USA**
4:30pm	**[10] Generation and monitoring of synthetic crack features in pipeline materials using cyclic pressure loading** *Dr Chris Alexander, Jon Rickert, ADV Integrity, Inc., Magnolia, TX; Christopher De Leon, Rhett Dotson, Felipe Freitas, Simon Slater, ROSEN USA, Houston, TX, USA*	**[33] Improving remediation programs with risk-based analyses of inline inspection data** *Dr Thomas Bubenik, Dr Benjamin Hanna, Dr William Harper, DNV GL, Columbus, OH, USA*	**[56] Data management strategies for an efficient implementation of Industry 4.0 integrity assessments** *Aidan Charlton and John Healy, Penspen Ltd, Newcastle, UK, Gustavo Romero, Penspen, Latin America*
5:00pm	**[11] Understanding the detection capabilities of an ultrasonic crack ILI robot in a dent** *Rogelio Guajardo Rodriguez, Dr Thomas Hennig, NDT Global, Karlsruhe, Germany; Carlota Mendez, Beatriz Tarramera, NDT GDAC Spain S.L., Barcelona, Spain*	**[34] Closed form probabilistic method for conducting pipeline remaining life assessment from ILI data** *Jocelyn Nelson, ExxonMobil Upstream Research Company, Spring, TX; Preston Smith, Pamela Tanner, ExxonMobil Upstream Oil and Gas Company, Spring, TX, USA; Abhed V., ExxonMobil Upstream Integrated Solutions Company, Bangalore, India*	**[57] Pipeline GIS and mega rule part 1: material property verification and the system of record** *Christopher De Leon, Ollie Burkinshaw, Anthongy Herman and Markus Brors, ROSEN USA, Houston, TX; Simon Slater, ROSEN USA, Columbus, OH, USA*
5:00 – 7:00pm	**Exhibition reception sponsored by Intero**		
5:30pm	**Conference day one concludes**		

Thursday, February 20			
6:45 – 7:45am	**Breakfast - Marriott Marquis, Level 2**		
	2.3 Cracks (cont'd) **Chair: Roland Palmer-Jones, ROSEN Group, Newcastle, UK**	**6.1 ILI analysis** **Chair: Tara McMahan, DNV GL, Dublin, OH, USA**	**7.1 Practical pigging** **Chair: Garry Matocha, Enbridge, Houston, TX, USA**
8:00am	**[12] Burst testing of pipes containing stress corrosion cracking** *Christopher Davies and Simon Slater, ROSEN USA, Columbus, OH; Dr Chris Alexander and Chantz Denowh, ADV Integrity, Magnolia, TX; and Todd Post, Consumers Energy, Jackson, MI, USA*	**[35] RunComs and randomness** *Joel Anderson, Enable Midstream Partners, Oklahoma City, OK, USA*	**[58] High temperature inline inspection** *Nader Alhamalawi and Basil Hostage, 3P Services, Wietmarschen / Lohne, Germany*

CONFERENCE PROGRAM (cont'd)

8:30am	**[13] A validation study of computed tomography inspection technology using full-scale test articles with crack-like features** *Dr Chris Alexander and Jon Rickert, ADV Integrity, Inc, Magnolia, TX; James Medford, Inspection Associates, Magnolia, TX, USA*	**[36] Maximizing the accuracy of MFL pipeline inspection** *Ben Scott, Baker Hughes, Cramlington, UK*	**[59] Behind closed doors; pipeline closures and traps revisited** *Dr Mike Kirkwood, T.D. Williamson, Dubai, UAE; Alan Morton, T.D. Williamson, Tulsa, OK, USA*
9:00am	**[14] Pipeline pressure analysis in the frequency domain** *Michael Rosenfeld and Dr Benjamin Zand, RSI Pipeline Solutions LLC, New Albany, OH, USA*	**[37] Individual anomaly sizing certainty on MFL data** *Markus Ginten, Christoph Hermes, Viktor Reimer, Niklas Wilming, ROSEN Group, Lingen, Germany*	**[60] Pipeline change of service – from dirty to clean in 5 easy steps** *Mark Gourley, Baker Hughes, Houston, TX, and Brett Roper, Energy Transfer, Tulsa, OK, USA*
9:30am	**Refreshment break sponsored by Halfwave**		
	8.1 Circumferential cracks **Chair: Tom Bubenik, DNV GL, Dublin, OH, USA**	**6.2 ILI analysis (cont'd)** **Chair: Jerry Rau, RCP Inc, Houston, TX, USA**	**7.2 Practical pigging (cont'd)** **Chair: Ian Smith, IDSMITH Pipeline Engineering, Londong, ON, Canada**
10:30am	**[15] A risk-based approach to circumferential stress corrosion cracking** *Rhett Dotson and Mark Wright , ROSEN USA, Houston, TX, USA*	**[38] ILI run-to-run comparison – bias assessment case study** *Matt Ellinger, Stacy Gibson, Eric Graf, DNV GL, Dublin, OH*	**[61] Ready, aim, pig!** *Dr Mike Kirkwood, T.D. Williamson, Dubai, UAE; Alan Morton, T.D. Williamson, Tulsa, OK, USA*
11:00am	**[16] Detection of non-axial stress corrosion cracking (SCC) using MFL technology** *Dane Burden and Matthew Romney, T.D. Williamson, Salt Lake City, UT, USA*	**[39] Leveraging ILI comparative analysis to accurately determine corrosion growth in pipelines** *Lisa Barkdull, Matthew Lewis and Josiah SooTot, Quest Integrity, Houston, TX, USA*	**[62] Stuck pig recovery** *Gary Anderson and Rolf Gunnar Lie, T.D. Williamson, Whitley Bay, UK*
11:30am	**[17] A case study in the detection and sizing of circumferential stress corrosion cracking** *James Hare, Ron Thompson, Novitech Inc, Vaughan, ON, Canada; Katrina Dwyer, Ray Gardner, Xcel Energy, Denver, CO, USA*	**[40] A fistful of data** *Jonathan Martin, Roland Palmer-Jones and Michael Smith, ROSEN Group, Newcastle, UK*	**[63] Cost-effective ultrasonic inspection of large diameter pipelines: technology update and case study** *Ries Augustijn and João Gonçalves, Intero Integrity Services, Tricht, The Netherlands*
12:00pm	**Lunch**		
	9.1 ILI verification **Chair: Ian Smith, IDSMITH Pipeline Engineering, Londong, ON, Canada**	**10.1 Codes and regulations** **Chair: Jerry Rau, RCP Inc, Houston, TX, USA**	**11.1 NDE (other than ILI verification)** **Chair: Terry Shamblin, Equitrans Midstream, Pittsburgh, PA, USA**
1:30pm	**[18] Corrosion under insulation in pipelines, avoiding pitfalls when inspecting with MFL or ultrasonic ILI tools** *Bernardo Cuervo and Mark McQueen, G2 Integrated Solutions, Houston, TX, USA*	**[41] The Gas Mega Rule: are you ready?** *Dr Mike Kirkwood, T.D. Williamson, Dubai, UAE; Jeff Wiese, TRC, Reston, VA, USA*	**[64] Enhancements to a prototype grade calculation algorithm through data analytics** *Dr Arash Kamari, Eduardo Munoz, Kiefner and Associates, Houston, TX; Troy Rovella, PG&E, San Ramon, CA; Dr Peter Veloo, Exponent, Los Angeles, CA, USA*
2:00pm	**[19] Considerations for validating an ILI technology: controlled implementation of a new MFL product** *Brett Conrad, Richard Kania and Vincent Tse, TC Energy, Calgary, AB; James Barlow, Jenny Jing Chen and McKenzie Kissel, Mistras-Onstream, Calgary, AB, Canada*	**[42] 192 final rule - impact on crack fatigue growth and pressure test reassessment intervals** *Dr Thomas Bubenik, Matt Ellinger, Steven Polasik, Shanshan Wu, DNV GL, Dublin, OH, USA*	**[65] Integrated material property verification - combining state of the art ILI and in-ditch testing** *Christopher De Leon, ROSEN USA, Houston, TX; Dr Simon Bellmare, Dr Steven Palkovic, Massachusetts Materials Technologies, Waltham, MA; Simon Slater, ROSEN USA, Columbus, OH, USA*

CONFERENCE PROGRAM (cont'd)

2:30pm	**[20] Improving inline inspection performance with dig feedback** *Adrian Belanger, T.D. Williamson, Houston, TX; Tod Barker, T.D. Williamson, Salt Lake City, UT, USA*	**[43] Case study on next generation capability** *Daryl Brister, Shea Capability & Compliance Solutions, Houston, TX, USA*	**[66] Influence of line-pipe steel microstructure on NDE yield strength predictive capabilities** *Dr Jeffrey Kornuta, Dr Nathan Switzner, Dr Solver Thorsson, Dr Peter Veloo, Exponent, Los Angeles, CA; Dr Peter Martin, Troy Rovella, PG&E, San Ramon, CA; Michael Rosenfeld, RSI Pipeline Solutions, Columbus, OH, USA*
3:00pm	**Refreshment break**		
	9.2 ILI verification (cont'd) **Chair: Gary Zunkel, Bluefin, Ames, IA, USA**	**12.1 Unpiggable pipelines** **Chair: Iain Colquhoun, National Energy Board, Calgary, AB, Canada**	**11.2 NDE (other than ILI verification) (cont'd)** **Chair: Terry Shamblin, Equitrans Midstream, Pittsburgh, PA, USA**
3:30pm	**[21] Validating an ILI run with and without data loss** *Ahmad Al Saif and Ayman Janbi, Saudi Aramco, Dammam, Saudi Arabia*	**[44] Combination MFL/deformation inspections of small-diameter unpiggable pipelines** *Ken Maxfield, KMax Inspection, Salt Lake City, UT, USA*	**[67] Nondestructive testing of pipeline materials: further evaluation of portable OES, XRF, LIBS, and filings to estimate chemical composition** *Dr Monty Liong, Dr Nathan Switzner, Dr Peter Veloo, Exponent, Los Angeles, CA; Melissa Gould, DNV GL, Yorba Linda, CA; Dr Peter Martin, Troy Rovella, PG&E, San Ramon, CA, USA*
4:00pm	**[22] Using full-scale destructive testing and metallurgical evaluation to quantify inspection performance** *Michael Turnquist, Quest Integrity, Houston, TX, USA*	**[45] Interpretation of local inspection data for unpiggable pipelines – understanding the meaning of nothing** *Fraser Gray and Susannah Turner, Highgrade Associates Ltd, Newcastle, UK*	**[68] A statistical approach to material verification of expected grade through opportunistic field measurements** *Dr Simon Bellemare, Dr Steven Palkovic, Parth Patel, Soheil Safari, Massachusetts Materials Technologies, Waltham, MA, USA*
4:30pm	**[23] Addressing pipeline strain through enhancements to AXISS™ predictive ILI measurement accuracy by accounting for over half a century of steel pipe manufacturing** *Mohamed ElSeify, Baker Hughes, Calgary, AB, Canada; Sylvain Cornu and Raymond Karé, Eddyfi Technologies, Milton Keynes, UK*	**[46] Do we require gauge pigs for difficult pipelines? (To gauge or not to gauge?)** *Geert Bontekoe, Quest Integrity, Houston, TX, USA*	**[69] Nondestructive evaluation of strength, toughness and residual stress** *Seunghun Choi, Dr Dongil Kwon, Seoul National University, Seoul, South Korea; Dongseong Ro, Frontics America, Schaumburg, IL, USA; Kwangho Kim, Frontics, Seoul, South Korea*
5:00pm	**Conference day two concludes**		
Friday, February 21			
6:45 – 7:45am	**Breakfast - Marriott Marquis, Level 2**		
	13.1 Repair **Chair: Bill Bruce, DNV GL, Dublin, OH, USA**	**12.2 Unpiggable pipelines (cont'd)** **Chair: Garry Matocha, Enbridge, Houston, TX, USA**	**14.1 Engineering assessment** **Chair: Dr Mike Kirkwood, T.D. Williamson, Dubai, UAE**
8:00am	**[24] Full encirclement engineered laminated steel sleeve system: engineering development and test results** *Shawn Laughlin, Pipe Spring LLC, The Woodlands, TX, USA*	**[47] Tank farm pipeline inspection program using robotics** *Greg Herbstritt, Juan Martinez, Todd McClellan, Colonial Pipeline Co., Alpharetta, GA, USA; Paul Laursen, Pipetel Technologies, Toronto, ON, Canada*	**[70] Using deep learning to identify the severity of pipeline dents** *Ishita Chakraborty and Brent Vyvial, Stress Engineering Services, Houston, TX, USA*

CONFERENCE PROGRAM (cont'd)

8:30am	**[25] An in-service welding and hot tapping competency framework** *Tran Mah-Paulson, T.D. Williamson, Edmonton, AB, Canada*	**[48] Spot checking or checking for spots?** *Danny Molyneux, Andrew Papenfuss, Quest Integrity, Aberdeen, UK*	**[71] Changes to in-line inspection approaches to consider with changing regulations** *Bruce Nestleroth, Kiefner Applus, Columbus, OH and Michael Rosenfeld, RSI Pipeline Solutions, Columbus, OH, USA*
9:00am	**[26] Statistical analysis of dig operations leading to productive repairs** *Jordan Dubuc, Tim Edward, Michael Murray, Dr Yevgeniy Petrov, OneBridge Solutions Inc., Boise, ID, USA*	**[49] Statistical methods for planning and evaluation of inspection on unpiggable pipelines** *Mark Stone, Sonomatic, Inc., Katy, TX, USA*	**[72] Quantifying the effects of interaction criteria on ILI defect assessments** *Dr T. Bubenik and Steven Polasik, DNV GL, Dublin, OH; Jason Cramer, Dominion Energy Ohio, North Canton, OH, USA*
9:30am	**Refreshment break**		
	13.2 Repair (cont'd) **Chair: Bill Bruce, DNV GL, Dublin, OH, USA**	**12.3 Unpiggable pipelines (cont'd)** **Chair: Iain Colquhoun, National Energy Board, Calgary, AB, Canada**	**14.2 Engineering assessment (cont'd)** **Chair: Andrew Cosham, Ninth Planet Engineering, Newcastle, UK**
10:00am	**[27] Use of full-scale testing as a means for managing pipeline integrity** *Dr Chris Alexander and Chantz Denowh, ADV Integrity, Magnolia, TX, USA*	**[50] A comparison between Pipers® and MFL pipeline data** *Zachary Shand, Anouk van Pol, John van Pol, Ingu Solutions Inc., Calgary, AB; Shelise Berteig, Whitecap Resources Inc., Calgary, AB, Canada*	**[73] Improved methods for sizing metal loss in dents for ECA** *Fernando Curiel, Rhett Dotson, Luis Sacramento, ROSEN USA, Houston, TX; Jacob Duska, Zach Locks, TC Energy, Charleston, WV, USA*
10:30am	**[28] Life extension of pipelines with crack-like defects using composite repairs** *Dr Paul Hill, Team Industrial Services Inc, Kendal, UK; Dr Troy Swankie, DNV GL, Loughborough, UK; Tim Webley, Cadent Gas Ltd, Birmingham, Aston, UK*	**[51] Pipeline integrity management of unpiggable pipelines – a case history** *Frank Gareau, Dr Arash Ilbagi, Ahmad Saab, Acuren, Calgary, AB, Canada*	**[74] Analysis of the properties of vintage girth welds** *Timothy Rudd, Valero Logistics UK Ltd, Milford Haven, UK; Kalen Jansen, ATCO Pipelines & Liquids, Edmonton, AB, Canada; Kirsty McDermott, National Grid, Warwick, UK; Dr Andrew Cosham, Ninth Planet Engineering Ltd, Newcastle, UK*
11:00am	**[29] Analyzing the use of standard inspection tools on composite repairs** *Aleese Post, Casey Whalen, ClockSpring|NRI, Houston, TX; Colton Sheets, Stress Engineering Services, Houston, TX, USA*	**[52] Ensuring effective compliance of external corrosion direct assessment** *Alfred Giordano, HMI Technical Solutions, Houston, TX; Michael (Alex) Bryant, TC Energy, Charleston, WV; Roderick Rheaume, HMI Technical Solutions, Johnston, RI, USA*	**[75] Advancements in records verification, class and consequence tools for the new gas and liquids rules** *Mauricio Palomino, Darrell Donaho, Mark Treybig, Jorge Martinez and Tracy Thorleifson, G2 Integrated Solutions, Houston, TX, USA*
11:30am	**Conference concludes**		

Program is subject to change.