


# Meeting Minutes

Meeting Held: August 17th, 2018

**Subject:** EPC Rotating Equipment Subcommittee Meeting (2018/19 Season)

Attendees:

Smitha Vadrevu - McDermott	Kalyan Malnedi - Elliott	Shadi Gilke - INEOS
Clayton Jurica - MHI	Kevin Kisor - MAN	
Seth Kennedy - DowDuPont	Dan Jones - Technip	
Brian Wadas - BHGE	Clayton Finney - BHGE	
Bryan Barrington - Lyondell	Rushi Gandhi - LINDE	

Item No.	Report	Action Required	
		By	Date
1	Safety Moment Review of Previous MOM		
2	<b>UPDATED</b> - EPC heads per the following:  Chair – Shane Harvey (sharvey@elliott-turbo.com) Co-Chair – Clayton Jurica ( <a href="mailto:clayton_jurica@mhicompressor.com">clayton_jurica@mhicompressor.com</a> ) Secretary – Smitha Vadrevu – McDermott (smitha.vadrevu@mcdermott.com)		
3	<b>2019 Spring Meeting and 15th Global Congress on Process Safety</b> <b><u>New Orleans, LA – Hilton Riverside</u></b>  <ul style="list-style-type: none"> <li>- <b>Call for Abstracts Opens – June 29<sup>th</sup></b></li> <li>- <b>Call for Abstracts Closes – November 12<sup>th</sup></b></li> <li>- <b>Papers Accepted/Rejected – December 14<sup>th</sup></b></li> <li>- <b>Draft Schedule Available – January 9<sup>th</sup></b></li> <li>- <b>Conference in New Orleans – March 31-April 4<sup>th</sup>, 2019</b></li> </ul>		
4	<ul style="list-style-type: none"> <li>- <b>Spring 2018 EPC Review of Feedback &amp; Ideas of 2019 Topics</b> <ul style="list-style-type: none"> <li>o Feedback Forms                             <ul style="list-style-type: none"> <li>▪ Reach out to potential authors who expressed interest in feedback forms</li> <li>▪ Review subjects suggested in feedback forms</li> <li>▪ Committee will reach out to all feedback contacts to see their interest in participating</li> <li>▪ See Appendix A – Feedback from Spring 2018</li> </ul> </li> </ul> </li> </ul>		
5	<b>Potential Topics for Abstracts</b> <ul style="list-style-type: none"> <li>- Reliability – Points of failure                             <ul style="list-style-type: none"> <li>o Outage planning</li> <li>o <b>How to manage data (Inspection, Repair, etc)</b></li> </ul> </li> <li>- Anti-Fouling – (ExxonMobil &amp; MHI Abstract submitted)</li> </ul> <div style="text-align: center;">   MHI XOM  Abstract_81718.pdf </div>		

Meeting Notes

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		By	Date
	<ul style="list-style-type: none"><li>- API 692 – Dry Gas Seals – (692 101 session w/ Ethylene specifics)<ul style="list-style-type: none"><li>o Reach out to API 692 to receive abstract</li><li>o Seal retrofits<ul style="list-style-type: none"><li>▪ John Crane &amp; Flowserve – Reach out</li></ul></li></ul></li><li>- Turboshow Papers that weren't selected</li><li>- Digitization – GE Compression<ul style="list-style-type: none"><li>▪ Big Data</li></ul></li><li>- Turboexpanders<ul style="list-style-type: none"><li>o LINDE to follow up, GE to follow up</li></ul></li><li>- Ethylene Product Pump – Lyondell<ul style="list-style-type: none"><li>o Mechanical Seals upgrades</li></ul></li><li>- Large Turbines – Mega Ethylene<ul style="list-style-type: none"><li>o MHI</li></ul></li><li>- High Cycle Fatigue Steam Turbine<ul style="list-style-type: none"><li>o INEOS</li></ul></li><li>- EEPCC October 2018 – Croatia (Could utilize papers)</li><li>- Water Injection – CGC Temperature Control<ul style="list-style-type: none"><li>o Technip</li></ul></li><li>- McDermott Bloomfield – Check on their involvement</li><li>- How to submit abstracts – Tutorial for next meeting</li></ul>		
6	<p>Future Meeting Dates - EPC Subcommittee Meeting</p> <ul style="list-style-type: none"><li>- September 28th 2018 – Next Meeting (Elliott to host)</li></ul>		
7	<p><b><u>Ethylene Producers Committee</u></b> <b><u>Anti-Trust Agreement</u></b></p> <p>No activity of the Committee shall involve the exchange, collection or dissemination among competitors of information, or be used for the purpose of bringing about or attempting to bring about any understanding or agreement, written or oral, formal or informal, express or implied, among competitors with regard to costs, prices or pricing methods, terms or conditions of sale, distribution, production quotas or other limitations, on either the timing, or volume of production, or sales, or allocation of territories or customers.</p>		

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### Appendix A:

#5a	"Really good; liked bringing in operator; also, lots of examples!"
#5b	"Very good! he's a good speaker!"
#5c	"Very good subject! Too many acronyms; can it work for other CV's?"
#5d	"Subject is too common!"
#5c	"What needs to be installed physically to monitor?"
\$5c	"Not an area relevant to me; so I learnt a lot!"
#5d	"A bit too much info presented – hard to keep up!"
#5d	"Excellent presentation – good job covering topic w/o becoming sales pitch!"
#5a	"More details of implementation required!"

#33b	"If it was a "101" course, could have been more technical!"
#33c	"More of an advertisement or history; not really technical/problem highlights!"
#33d	"Very relevant, timely, insightful!"
#33c	"Nice summary of recent improvements!"
#33d	"Energy impact? Cost ratios?"
#33a	"Best paper ever on wash oil!"
#33d	"I want one!"
#33d	"Thanks!"

### Some suggestions for future papers:

<b>FROM SESSION [5]: "Reliability and Operability of Rotating Equipment in Ethylene Plants Session" Monday, April 23, 2018 09:30 AM - 11:30 AM; Orlando World Center Marriott- Room: Palms Ballroom ROYAL</b>				
MHI Machines difficulties and wrong design and how to deal with for example impellers issues and high delta P in extraction	NASER	SABIC SAUDI ARABIA	Tel: Fax: Email:	
- Water injection programs for compressors - Vibration mitigation tactics Other possibilities other than fouling	Tiffany Hester	Sasol	Tel: 601-528-0042 Fax: E-mail: <a href="mailto:tif.hester@gmail.com">tif.hester@gmail.com</a>	
Furnace mechanical issues, metallurgy, welding, refractory, counter-weights, sealing from air ingress, etc.	Cesar Torres	Ineos Olefins & Polymers 2 Miles South FM 2917 on FM 2004 Alvin, TX 77511	Tel: 281-581-3122 Fax: Email: <a href="mailto:cesar.torres@ineos.com">cesar.torres@ineos.com</a>	
Effect of water chemistry on CGC fouling	Mark Whitney	Linde Engineering	Tel: 281-717-9083 Fax: Email: <a href="mailto:mark.whitney@linde.com">mark.whitney@linde.com</a>	
Best practices regarding improved rotating equipment reliability	Nathan Reed	Westlake Chemicals	Tel: Fax: Email:	
- Compressor troubleshooting Inspections of rotating equipment	Kate Heymans	Dow Chemicals	Tel: Fax: Email:	

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Need to see more field experience building on the current assets capability improvement without major hardware modification	Hussain Al Zahrani	SABIC/Sharq	Tel: Fax: Email: <a href="mailto:zahraniha@sharq.sabic.com">zahraniha@sharq.sabic.com</a>	
Solids carry over to the steam used to run those compressors	Fahad Al Milali	SABIC Saudi Arabia - Jubail	Tel: +966-5-4646-3608 Fax: Email: <a href="mailto:alfahad3608@hotmail.com">alfahad3608@hotmail.com</a>	
Surface condenser replacement overview, construction challenges etc	Megan Finstad	Dow Chemicals	Tel: 780-998-8822 Fax: Email: <a href="mailto:mfinstad@dow.com">mfinstad@dow.com</a>	

**FROM SESSION [33] "Ethylene Plant Rotating Equipment Panel Discussion" Monday, April 23, 2018 2:00 PM - 5:00 PM; Orlando World Center Marriott- Room: Palms Ballroom ROYAL**

Micheal Smith	ExxonMobil	Tel: 225-331-0122 Fax: Email: <a href="mailto:micheal.e.smith@exxonmobil.com">micheal.e.smith@exxonmobil.com</a>		
Marty Novak	Huntsman	Tel: 409-723-3425 Fax: Email: <a href="mailto:marty_novak@huntsman.com">marty_novak@huntsman.com</a>		

**FROM SESSION [78] "Ethylene Plant Operations Session", Tuesday, April 24, 2018: 8:00 AM - 11:00 AM; Orlando World Center Marriott- Room: Palms Ballroom SAGO**

Industry operating experience with SCR in ethylene furnaces	David Spicer	ExxonMobil Chemical 4500 Bayway Drive Baytown, TX 77520	Tel: 346-259-2660 Fax: Email: <a href="mailto:david.b.spicer@exxonmobil.com">david.b.spicer@exxonmobil.com</a>	
All troubleshooting subjects are greatly appreciated	Gwen Kelley	Shell	Tel: Fax: Email: <a href="mailto:gwen.kelley@shell.net">gwen.kelley@shell.net</a>	

Finally, some volunteers for future papers:

**FROM SESSION [5]: "Reliability and Operability of Rotating Equipment in Ethylene Plants Session" Monday, April 23, 2018 09:30 AM - 11:30 AM; Orlando World Center Marriott- Room: Palms Ballroom ROYAL**

Yes; MHI machines and machinery concerns in olefin plants	Naser	SABIC Saudi Arabia	Tel: Fax: Email: <a href="mailto:mutairina@sharq.sabic.com">mutairina@sharq.sabic.com</a>	
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### Meeting Notes

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Yes; Subjects: - <ul style="list-style-type: none"><li>• New anti-foulant chemistries</li><li>• Compressor anti-foulant strategies</li><li>• Nitrogen free anti-foulants</li><li>• Innovations in Furnace sulfiding agents</li></ul>	James Ondyak	Dorf Ketal 11200 Westheimer Rd. Suite 400 Houston, TX 77042	Tel: 713-419-3376 Fax: Email: <a href="mailto:james.ondyak@dorketal.com">james.ondyak@dorketal.com</a>	
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7.	Compressor fouling and coatings	Francesca Monti	BHGE	Tel: Fax: Email: <a href="mailto:francesca.monti@ge.com">francesca.monti@ge.com</a>
8.	Unable to consider until after turnaround ending July	Marty Novak	Huntsman	Tel: 409-723-3425 Fax: Email: <a href="mailto:marty_novak@huntsman.com">marty_novak@huntsman.com</a>