

Question 7 - All vendor correspondence related to SCR reactor sizing, catalyst volume, NOx control efficiency, catalyst cost, catalyst replacement schedule and catalyst guarantees should be provided. This includes the original requests submitted to vendors and (catalyst) suppliers by Minnkota and its consultants. This must also include the description of the gas stream that was supplied to the vendors.

Response: The tabulation below provides an index to all correspondence related to these topics. Where an item is considered by Minnkota to be CONFIDENTIAL, the indication as such is given in the third column. The confidential and non-confidential correspondence will be submitted to NDDH in electronic form on separate CDs. Minnkota requests certification of the claimed confidential materials as confidential in accordance with the Air Pollution Control Rules for the State of North Dakota at 33-15-01-16. Confidentiality of records.

Date	Time	Confidential	Type	From	To	Summary Description	Attachments
1/6/09	1:31 PM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech V. Rummenhohl, Fuel-Tech	Request for TESCO consulting	None
1/7/09	8:50 AM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD V. Rummenhohl, Fuel-Tech	Agree to assist BMcD	None
1/12/09	12:03 PM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD V. Rummenhohl, Fuel-Tech	Info needed for TESCO mass balance	None
1/13/09	11:17 AM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech V. Rummenhohl, Fuel-Tech	FRP temperature considerations for TESCO	None
1/15/09	9:47 AM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech V. Rummenhohl, Fuel-Tech	Request for review of catalyst management plan for TESCO	BMcD catalyst management plan for TESCO (draft)
1/23/09	8:10 AM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Mass balance & PFD for TESCO	PFD for TESCO Mass balance for TESCO
1/23/09	9:58 AM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech V. Rummenhohl, Fuel-Tech	Design issues for TESCO; Additional documents needed	None
2/7/09	5:25 PM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	PFDs for TESCO Mass balances for TESCO	PFDs for TESCO Mass balances for TESCO
2/9/09	5:30 PM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech	Questions RE: TESCO	None
3/3/09	12:26 PM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech	Heat source for reheat; Decision on SCR reagent	None
3/6/09	11:59 AM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Effect of urea conversion on mass balances; Request for confirmation of SCR mass balances needed	None
3/6/09	12:10 PM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech	Natural gas for urea conversion	None
3/6/09	12:25 PM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech	Confirm need for LDSCR & TESCO mass bal for U1 & U2	None
3/12/09	8:59 AM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Mass balances, PFDs & reactor sizes for TESCO & LDSCR for MRYS U1 & U2	Mass balances, PFDs & reactor sizes for TESCO & LDSCR for MRYS U1 & U2
3/19/09	9:06 AM		e-mail	C. Bowman, BMcD	M. Gialanella, BPI	Request for SCR quotes	Fuel analyses; Flue gas conditions

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3/20/09	2:55 PM		e-mail	C. Bowman, BMcD	M. Gialanella, BPI	Correction of SCR COD dates	None
3/30/09	3:43 PM		e-mail	C. Bowman, BMcD	M. Gialanella, BPI	GGH leakage rates allowed; Steam reheat not an option	None
4/1/09	2:26 PM		e-mail	J. Waller, BPI	C. Bowman, BMcD	Dates for quotation	None
4/2/09	11:15 AM		e-mail	J. Waller, BPI	C. Bowman, BMcD	Flue gas conditions	Comparison Table
4/7/09	10:03 AM		e-mail	C. Bowman, BMcD	J. Waller, BPI	Corrected flue gas conditions	Flue gas conditions
4/9/09	12:23 PM		e-mail	J. Waller, BPI	C. Bowman, BMcD	FGD GGH leakage rates allowed	None
4/9/09	1:15 PM		e-mail	C. Bowman, BMcD	J. Waller, et al, BPI	GGH leakage rates allowed	previous e-mail of 3/30/09; 3:43 PM
4/20/09	7:14 AM	Y	e-mail	J. Waller, BPI	C. Bowman, BMcD	Preliminary info for quotation	Flue Gas Conditions Flow diagram (LDSCR) Flow diagram (TESCR) FGD GGH dimensions / loads SCR GGH dimensions SCR GGH loads SCR Reactor Elev. Views SCR Reactor Plan View
4/28/09	3:36 PM		e-mail	J. Waller, BPI	C. Bowman, BMcD	Δ P, ammonia use, gas firing	Tabulation of expected operating data
6/1/09	2:47 PM	Y	e-mail	J. Waller, BPI	C. Bowman, BMcD	BPI's SCR proposal #502331	SCR Budgetary proposal (confidential) BPI/RPI SCR Reference List (public)
8/3/09	8:24 AM		e-mail	W. Jones, Haldor-Topsoe	R. Blakley, BMcD	Agree to meet with Minnkota	None
8/3/09	5:18 PM		e-mail	R. Blakley, BMcD	W. Jones, Haldor-Topsoe	Purpose for meeting	None
8/5/09	1:11 PM		e-mail	R. Bryant, BMcD	W. Jones, Haldor-Topsoe	Agenda for meeting	Agenda for meeting at Haldor-Topsoe
8/5/09	8:38 PM		e-mail	N. White, Haldor-Topsoe	R. Bryant, BMcD	Agenda for meeting	Agenda for meeting at Haldor-Topsoe
8/7/09	2:56 PM		e-mail	R. Bryant, BMcD	N. Rosha, CERAM	PFDs & Mass balances	Mass balances, PFDs & reactor sizes for TESCR & LDSCR for MRYS U1 & U2 (from Fuel-Tech)
8/7/09	3:05 PM		e-mail	R. Bryant, BMcD	Meeting invitees	Agenda for meeting	Agenda for meeting at Haldor-Topsoe
8/7/09	3:13 PM		e-mail	R. Bryant, BMcD	Meeting invitees	Agenda for meeting	Agenda for meeting with CERAM

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8/13/09	11:18 AM		e-mail	N. Rosha, CERAM	R. Bryant, BMcD	Presentation & Reference List	CERAM presentation at BMcD 8/11 CERAM LDSCR/TESCR Ref. List
8/18/09	3:14 PM		e-mail	W. Jones, Haldor-Topsoe	R. Bryant, BMcD	Scope of Work	HTI typical Scope of Work
8/19/09	9:19 AM		e-mail	W. Jones, Haldor-Topsoe	R. Bryant, BMcD	Startup procedure for Amager 1	Presentation on start-up procedure for boiler, FGD& SCR at Amager Unit 1
8/25/09	5:17 PM	Y	e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech V. Rummenhohl, Fuel-Tech	Request for review of prelim design for TESCO & LDSCR	BPI's SCR proposal #502331 Flue Gas Conditions Flow diagram (LDSCR) Flow diagram (TESCR) FGD GGH dimensions / loads SCR GGH dimensions SCR GGH loads SCR System Performance SCR Reactor Elev. Views SCR Reactor Plan View
8/26/09	4:26 PM		e-mail	R. Bryant, BMcD	W. Jones, Haldor-Topsoe	Request for recommendations	Scope of Services Microbeam Report 1084 Excerpt from 4/2007 Vendor Query
8/26/09	4:30 PM		e-mail	R. Bryant, BMcD	N. Rosha, CERAM	Request for recommendations	Scope of Services Microbeam Report 1084 Excerpt from 4/2007 Vendor Query
9/1/09	6:57 AM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Preliminary PFDs	PFD for TESCO for MRY U1 & U2 PFD for LDSCR for MRY U1 & U2
9/1/09	5:04 PM	Y	e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech V. Rummenhohl, Fuel-Tech	Discussion of design and operating issues for TESCO & LDSCR	Mark-up of BPI/RPI proposal drawings
9/2/09	11:18 AM	Y	e-mail	R. Blakley, BMcD	J. Waller, BPI	Questions on BPI design	SCR Budgetary proposal (confidential) BPI/RPI SCR Reference List (public)
9/3/09	3:00 PM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Problem with attachments for e-mail of 9/1/09 5:04 PM; Hitachi No-Leak GGH brochure	Hitachi No-Leak GGH brochure Argillon SINOX list of toxic agents

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9/3/09	6:23 PM	Y	e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech	Re-transmittal of preliminary design of ductwork, TESCR w/GGH, LDSCR w/GGH	BMcD plan & elev dwgs of ducts Markup of confidential BPI proposal drawings (plan & elev) of SCR towers
9/11/09	3:45 PM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Updated PFD/mass balances	PFD / mass balance for TESCR for MRY U1 & U2 PFD / mass balance for LDSCR for MRY U1 & U2
9/15/09	7:36 AM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Comments on prelim design for MRY LDSCR and TESCR	Fuel-Tech Comments on BMcD prelim design for MRY LDSCR and TESCR
9/15/09	9:18 AM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech	Questions on Fuel-Tech mass balance discrepancies	Fuel-Tech PFD / mass balances BMcD comparison of Fuel-Tech data
9/15/09	9:53 AM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Resolution of discrepancy	None
9/17/09	11:16 AM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech	Request for information	None
9/18/09	1:32 PM	Y	e-mail	G. Holscher, CERAM	L. Kvernen, Minnkota	Proposal Submittal	CERAM proposal (confidential) CERAM Reference lists (public)
9/22/09	11:57 PM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Revised PFDs for Unit 1	Revised Fuel-tech PFD/mass balances for MRY U1 LD/TE SCR Additional mass balance data
9/23/09	4:51 PM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech	Questions about Fuel-Tech mass balance results	Fuel-Tech PFD / mass balances BMcD comparison of Fuel-Tech data
9/25/09	6:59 AM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Corrected PFD / mass balance	Revised Fuel-tech PFD/mass balances for MRY U1 TESCR Additional mass balance data
9/25/09	1:31 PM		e-mail	S. Libby, Minnkota	P. Dyer, BMcD	B & W response to survey about catalyst changeout	B & W response to survey about catalyst changeout
9/25/09	3:31 PM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech	Questions about Fuel-Tech mass balance results	Revised Fuel-tech PFD/mass balances for MRY U1 & U2 LD/TE SCR Additional mass balance data

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9/28/09	10:05 AM		e-mail	R. Johnson, Fuel-Tech	R. Blakley, BMcD	Revised Fuel-Tech PFDs	Revised Fuel-Tech LD/TE SCR PFDs and additional mass balance information
9/28/09	1:03 PM	Y	e-mail	W. Jones, Haldor-Topsoe	R. Bryant, BMcD	HTI budgetary quote for catalyst for LDSCRs at MRY	None
10/1/09	2:29 PM	Y	e-mail	R. Blakley, BMcD	J. Waller, BPI	Follow-up questions about BPI's SCR proposal #502331	BPI's SCR proposal #502331
10/5/09	1:27 PM		e-mail	S. Benson, Microbeam	W. Jones, Haldor-Topsoe	Sulfation of fly ash	Excerpt from paper by S. Benson
10/9/09	9:33 AM		e-mail	W. Jones, Haldor-Topsoe	R. Bryant, BMcD	Update on Amager	None
10/12/09	12:55 PM	Y	e-mail	W. Jones, Haldor-Topsoe	R. Bryant, BMcD	HTI proposal for catalyst for LDSCRs at MRY	HTI proposal for catalyst for LDSCRs at MRY U1 & U2
10/13/09	8:42 AM	Y	e-mail	N. Rosha, CERAM	L. Kvernen, Minnkota	CERAM proposal for catalyst for MRY LDSCR & TESCR	CERAM proposal for catalyst for MRY LDSCR & TESCR
10/23/09	3:35 PM	Y	e-mail	W. Jones, Haldor-Topsoe	R. Blakley, BMcD	Clarification of HTI proposal	None
12/22/09	9:21 AM		e-mail	R. Blakley, BMcD	R. Johnson, Fuel-Tech	Reheat data discrepancy	Revised Fuel-Tech PFD/mass balance
1/6/10	2:45 PM		e-mail	R. Blakley, BMcD	W. Jones, Haldor-Topsoe	Request for written confirmation	Letter dated 1/6/2010 from B. Blakley
1/6/10	2:37 PM		e-mail	R. Blakley, BMcD	N. Rosha, CERAM	Request for written confirmation	Letter dated 1/6/2010 from B. Blakley
1/11/10	1:03 PM		e-mail	R. Blakley, BMcD	V. Rummenhohl, Fuel-Tech	Reheat data discrepancy	Revised Fuel-Tech PFD/mass balance
1/13/10	3:02 PM		e-mail	N. Rosha, CERAM	R. Blakley, BMcD	Written confirmation	Letter dated 1/6/2010 from B. Blakley
1/13/10	5:29 PM		e-mail	W. Jones, Haldor-Topsoe	R. Blakley, BMcD	Written confirmation	Letter dated 1/13/2010 from W. Jones
1/15/10	9:14 AM		e-mail	V. Rummenhohl, Fuel-Tech	R. Blakley, BMcD	Reheat data discrepancy	None
1/22/10	1:46 PM		e-mail	V. Rummenhohl, Fuel-Tech	R. Blakley, BMcD C. Weilert, BMcD	Reheat data discrepancy	Corrected Fuel-Tech PFD / mass balance for MRY U1 LDSCR