

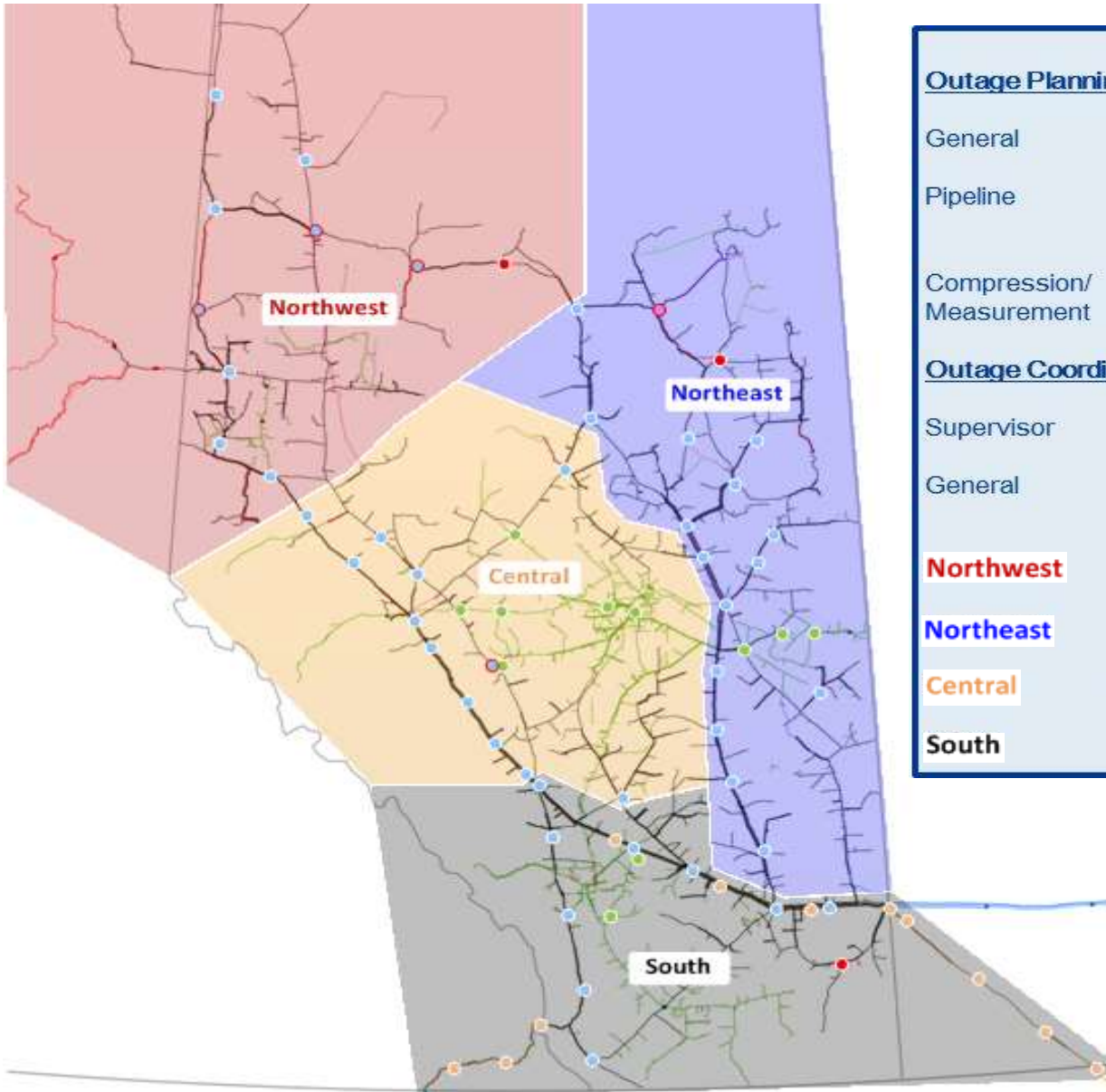


NGTL & Foothills Systems Monthly Outage Forecast August 2016

August Monthly Outage Forecast

The Monthly Outage Forecast is a tool provided by TransCanada to show the estimated operational capability. This information is provided for informational purposes only and is not to be relied upon for any other purpose whatsoever. The information is based upon certain assumptions that may or may not be accurate, and therefore is subject to various risks and uncertainties. TransCanada shall not be liable for damages sustained as a result of any use or reliance on such information. Please note, only known and planned outages at the time of publishing will be included in the Monthly Outage Forecast. As new outages are planned they will be added to subsequent MOF reports.

NGTL & FH MAP



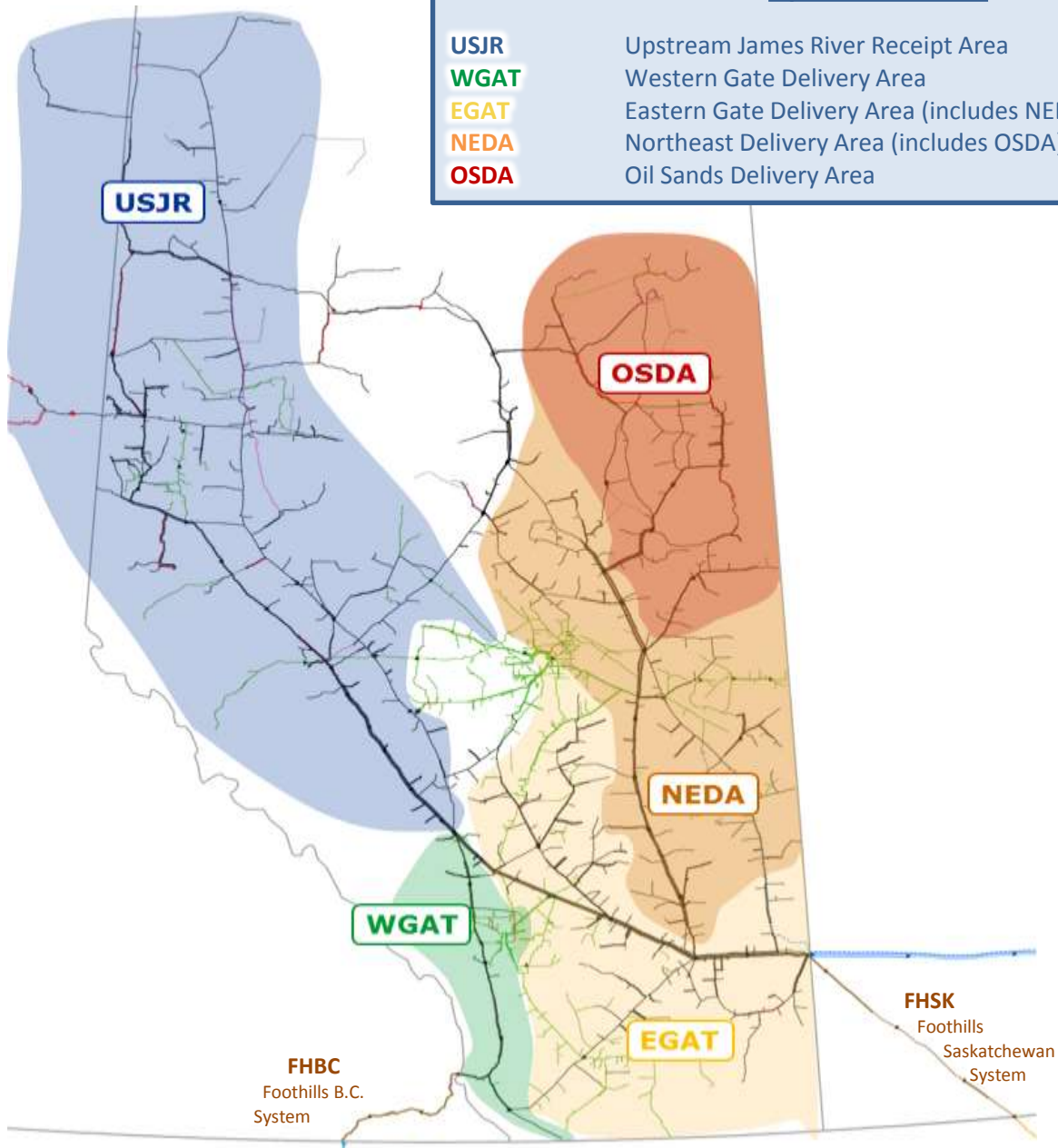
Outage Planning		
General	Chau Johnston	403.920.6061
Pipeline	Mike Wylie Rahim Ruda	403.920.7346 403.920.6360
Compression/ Measurement	Bruce Hansen	403.920.5613
Outage Coordination		
Supervisor	Jeff Stoffregen	403.920.6337
General	Chuang Li Ashley Lim	403.920.5291 403.920.6669
Northwest	Andrea Watters	403.920.7638
Northeast	Brooke Dillabough	403.920.5144
Central	Chris Pho	403.920.6016
South	Damola Daramola	403.920.6604

For NGTL System Facilities Segment codes please view link below

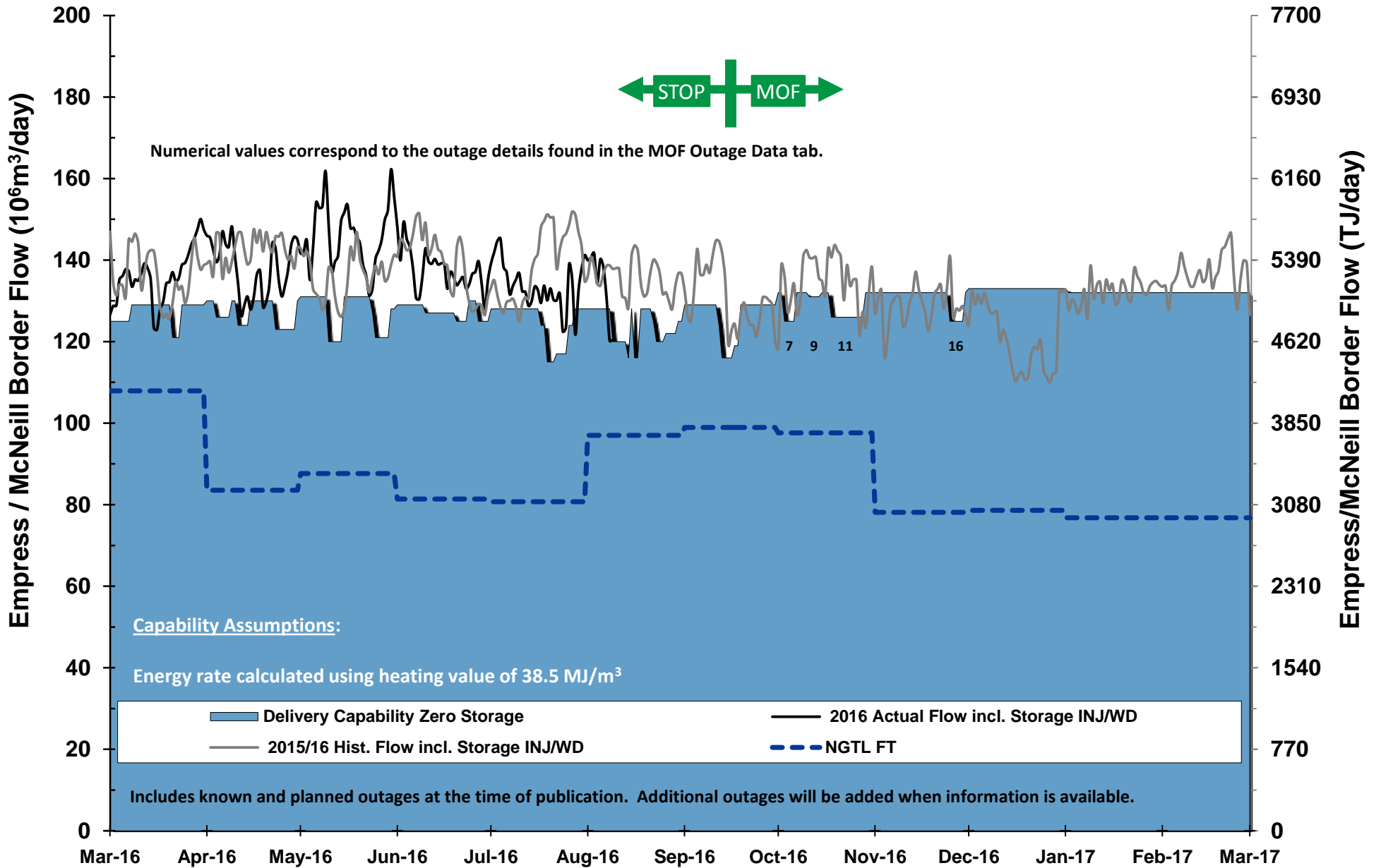
http://www.transcanada.com/customerexpress/docs/fh_system_maps/AB_System_Map_2015_Segments_Rev18.pdf

Operational Areas

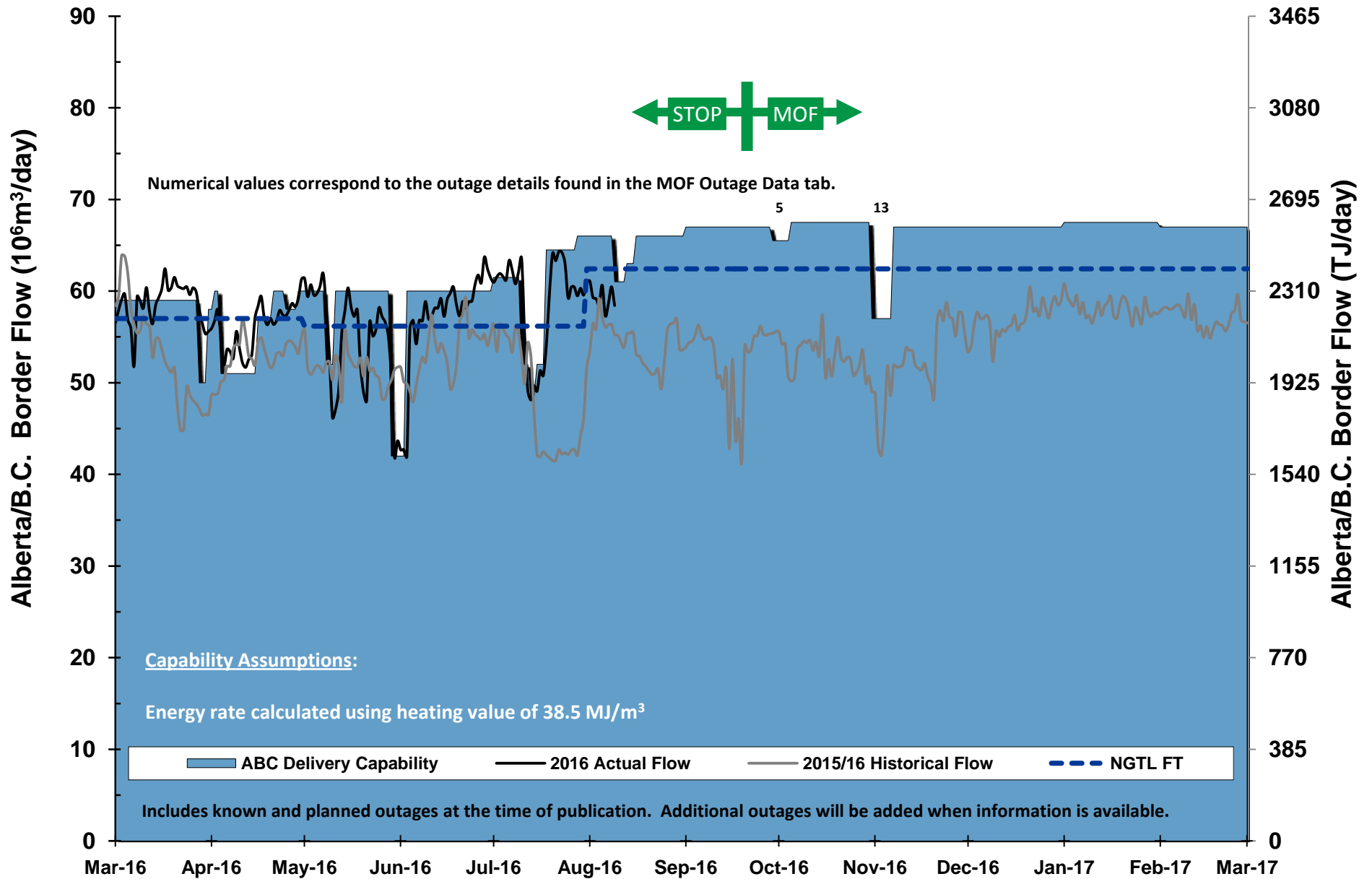
USJR	Upstream James River Receipt Area
WGAT	Western Gate Delivery Area
EGAT	Eastern Gate Delivery Area (includes NEDA and OSDA)
NEDA	Northeast Delivery Area (includes OSDA)
OSDA	Oil Sands Delivery Area



Empress/McNeill Border



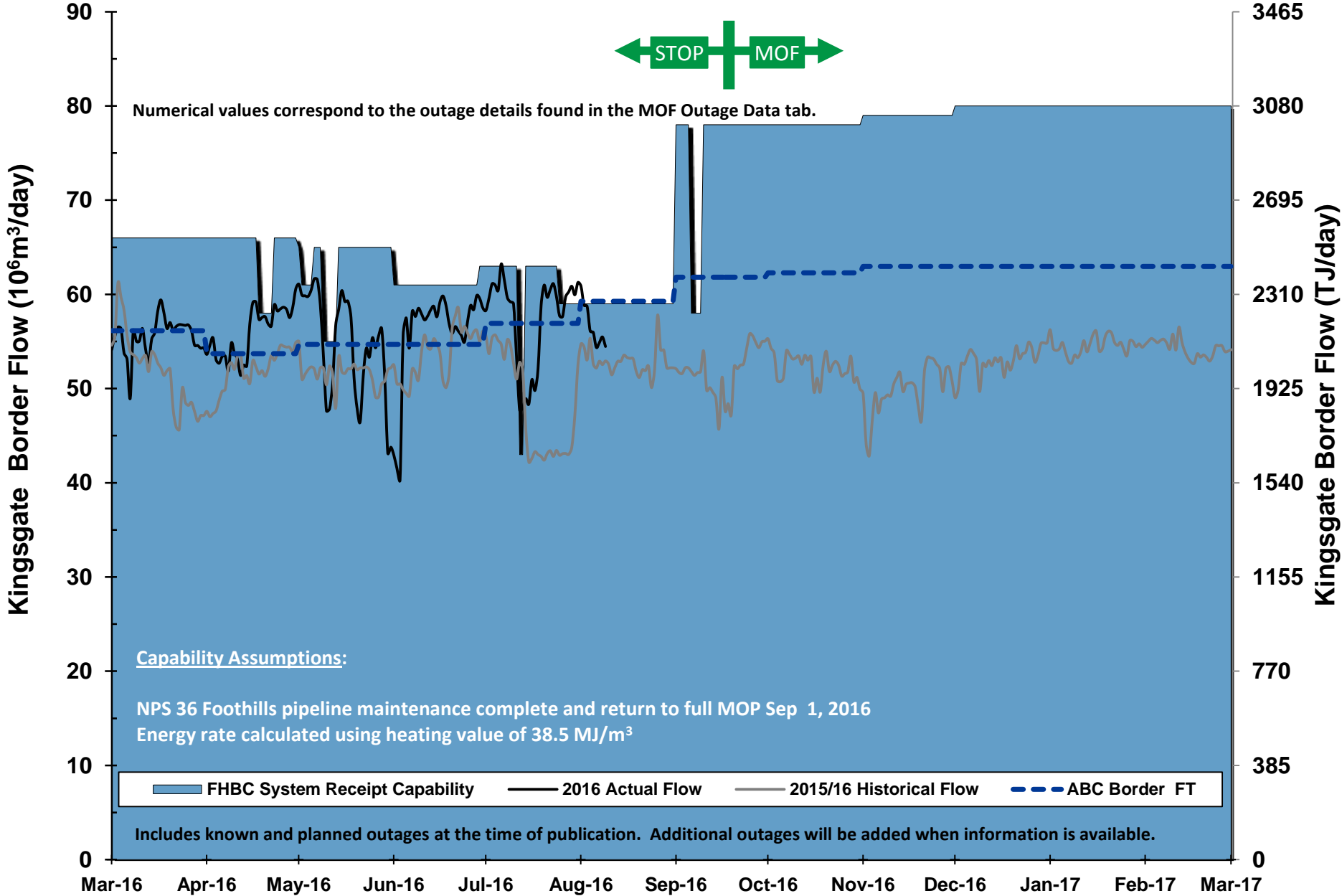
Alberta/B.C. Border



Kingsgate Border

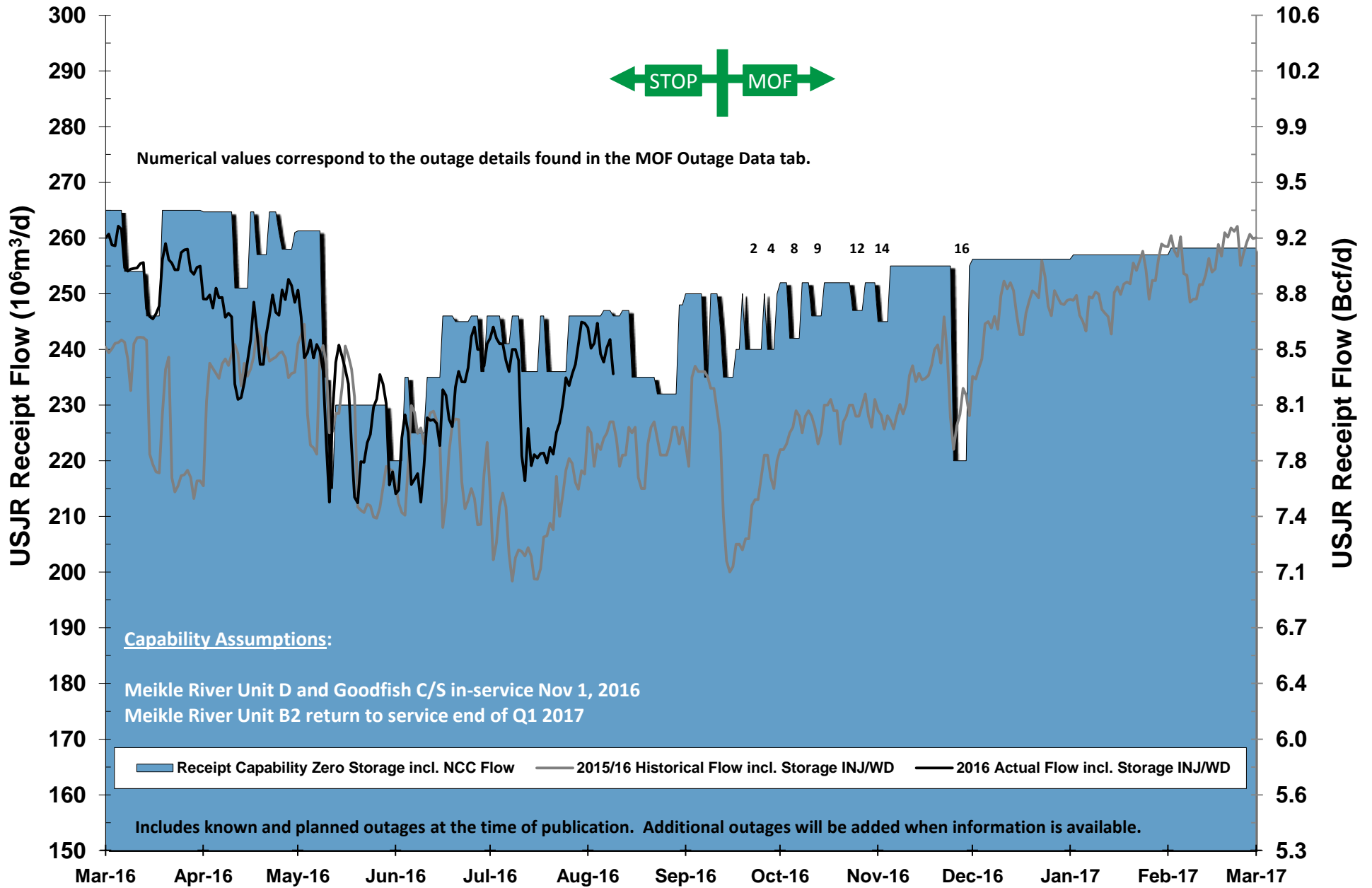


Numerical values correspond to the outage details found in the MOF Outage Data tab.



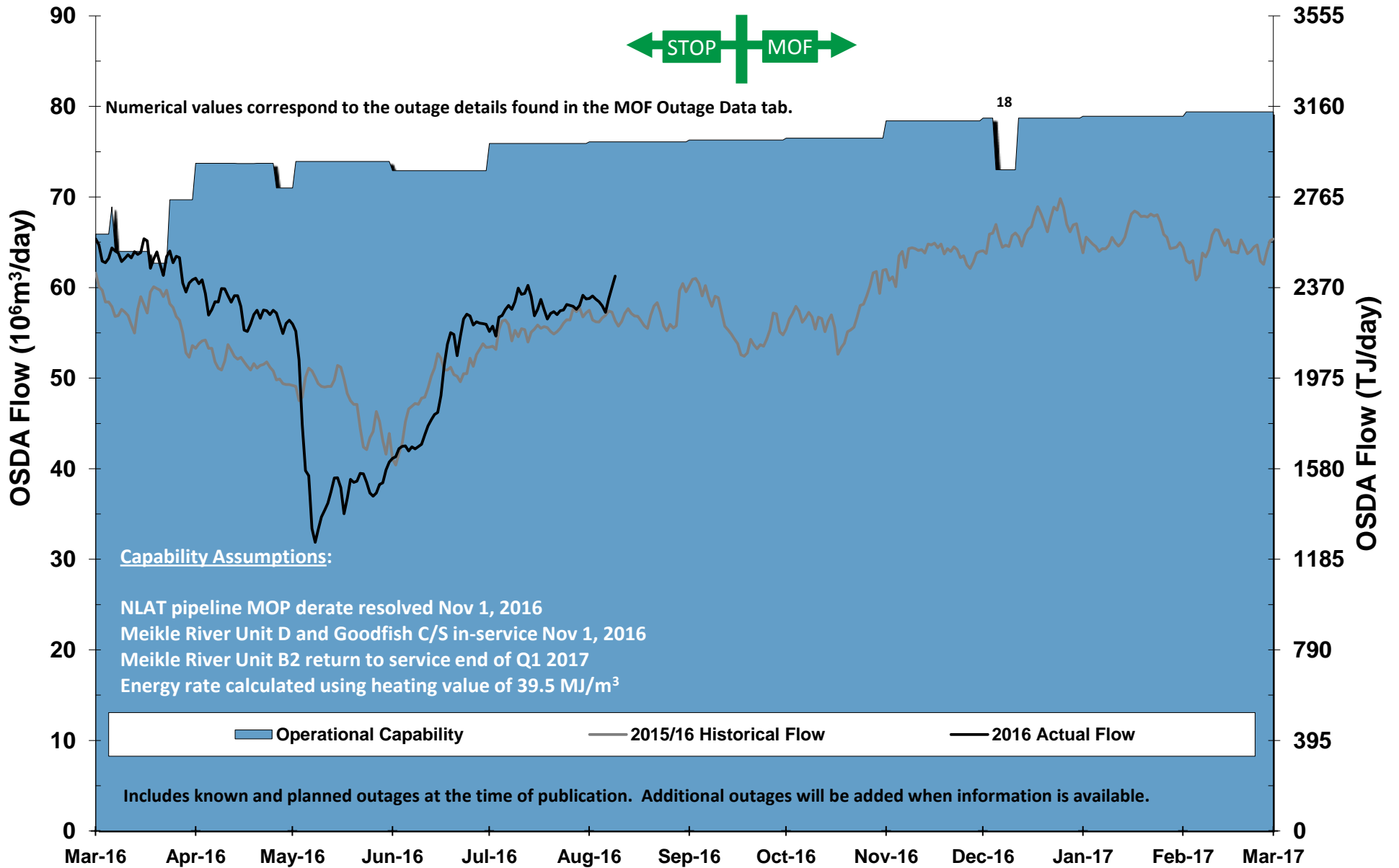
Upstream of James River Outlook

Segments 1, 2, 3, 4, 5, 7, partial 8, partial 9, 24, 26, partial 28



Oil Sands Delivery Area (OSDA) Outlook

Segments 10, 11, 14



Area Definitions

USJR Upstream James River Receipt Area: Groundbirch East, Gordondale, Big Eddy, January Creek, and Rat Creek West interconnects, and all receipt locations in Segments 1, 2, 3, 4, 5, 7, partial 8, partial 9, 24, 26, partial 28.
EGAT East Gate Delivery Area: Empress, McNeill, Unity, Cold Lake, Aeco C, Warwick Southeast, Chancellor, Carbon, Severn Creek, and Crossfield interconnects, and all delivery locations in Segments 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, partial 21, 22, 23, partial 28.
 • **NEDA** North and East Delivery Area: Unity, Cold Lake, Warwick Southeast interconnects, and all delivery locations in Segments 10, 11, 12, 13, 14, 15, 16, 23, partial 28:
 • **OSDA** Oil Sands Delivery Area: Cold Lake interconnect, and all delivery locations in Segments 10, 11, 14.
WGAT West Gate Delivery Area: Alberta B.C. and Alberta Montana interconnects, and delivery locations in partial Segment 21.

OUTAGE #	SEG #	OUTAGE DESCRIPTION	DATES		RECEIPT/DELIVERY IMPACT	CONTACT	AREA
			START	FINISH			
1	7	NPS 24 Cutbank Lateral Loop - Pipeline Maintenance (9 days).	09/12/16	09/20/16	Potential IT/FT receipt restriction at Musreau Lake, Musreau Lake West, Musreau Lake No 2, Musreau Lake North, Cutbank River, Copton Creek, Narraway River, Nose Mountain and Bilbo meter stations. Capability 9-14 e6m3/d. Typical Flow 15-20 e6m3/d. Nil required at Wapiti Centre Sales and Wapiti South Sales. Typical Flow 60 e3m3/d.	Andrea Watters	Local
2	9	NPS 30 Western Alberta System (WAS) Mainline - Pipeline Maintenance (6 days).	09/20/16	09/25/16	Potential IT/FT receipt restriction in the Upstream James River Receipt Area. Capability 240 E6m3/d. Typical Flow 230-265 E6m3/d. Nils required at Blue Rapids, Boggy Hall, Sand Creek, Alder Flats, Minnehik Buck Lake and Minnehik Buck Lake B meter stations. Typical Flow 4000 E3m3/d.	Chris Pho	USJR Local
3	19	NPS 42 Foothills Pipeline Zone 9 - Pipeline Maintenance (7 days).	09/22/16	09/28/16	Potential IT/FT restriction on the Foothills Saskatchewan System. Capability 35-50 E6m3/d. Typical Flow 40-45 E6m3/d.	Damola Daramola	FHSK
4	7	Berland C/S - Station Maintenance (3 days).	09/27/16	09/29/16	Potential IT/FT receipt restriction in the Upstream James River Receipt Area. Capability 240 E6m3/d. Typical Flow 230-265 E6m3/d.	Chris Pho	USJR
5	21	NPS 42 Western Alberta System (WAS) Mainline Loop - Pipeline Modifications (6 days). Capacity Revised	09/29/16	10/04/16	Potential IT/FT delivery restriction in the West Gate Delivery Area. Alberta B.C. delivery Capability 65 E6m3/d. Typical Flow 57-64 e6m3/d.	Chris Pho	WGAT
6	15	NPS 30 North Lateral Loop #2 - Pipeline Modifications (6 days within window). Dates and Duration Revised	10/03/16	10/08/16	Potential IT/FT delivery restriction in the North and East Delivery Area. Capability 102 E6m3/d. Typical Flow 95-105 E6m3/d.	Rahim Ruda	NEDA
7	18	Schrader Creek #1 - Station Maintenance (4 days). New	10/03/16	10/06/16	Potential IT/FT delivery restriction in the East Gate Delivery Area. Empress/McNeill delivery Capability 125 E6m3/d. Typical Flow 125-135 e6m3/d.	Damola Daramola	EGAT
8	7	Latornell C/S - Station Maintenance (4 days).	10/04/16	10/07/16	Potential IT/FT receipt restriction in the Upstream James River Receipt Area. Capability 242 E6m3/d. Typical Flow 230-260 E6m3/d.	Chris Pho	USJR
9	3	Hidden Lake C/S - Station Maintenance (4 days).	10/11/16	10/14/16	Potential IT/FT receipt restriction in the Upstream James River Receipt Area. Capability 246 E6m3/d. Typical Flow 230-265 E6m3/d. Potential IT/FT delivery restriction in the East Gate Delivery Area. Empress/McNeill delivery Capability 131 E6m3/d. Typical Flow 125-135 e6m3/d	Andrea Watters	USJR EGAT
10	2	NPS 8 Dunvegan West Lateral - Pipeline Modifications (6 days within window). Dates Revised	10/12/16	10/17/16	Nil required at Dunvegan West and Dunvegan West #2. Typical Flow 50 E3m3/d.	Rahim Ruda	Local
11	18	NPS 42 Edson & Central Alberta System (CAS) Mainline Loop - Pipeline Maintenance (11 days).	10/18/16	10/28/16	Potential IT/FT delivery restriction in the East Gate Delivery Area. Empress/McNeill delivery Capability 126 E6m3/d. Typical Flow 125-135 E6m3/d.	Damola Daramola	EGAT

C/S Compressor Station
 M/S Meter Station
 Light Shade Changed Entry
 Dark Shade New Entry

Area Definitions

USJR Upstream James River Receipt Area: Groundbirch East, Gordondale, Big Eddy, January Creek, and Rat Creek West interconnects, and all receipt locations in Segments 1, 2, 3, 4, 5, 7, partial 8, partial 9, 24, 26, partial 28.
EGAT East Gate Delivery Area: Empress, McNeill, Unity, Cold Lake, Aeco C, Warwick Southeast, Chancellor, Carbon, Severn Creek, and Crossfield interconnects, and all delivery locations in Segments 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, partial 21, 22, 23, partial 28.
 • **NEDA** North and East Delivery Area: Unity, Cold Lake, Warwick Southeast interconnects, and all delivery locations in Segments 10, 11, 12, 13, 14, 15, 16, 23, partial 28:
 • **OSDA** Oil Sands Delivery Area: Cold Lake interconnect, and all delivery locations in Segments 10, 11, 14.
WGAT West Gate Delivery Area: Alberta B.C. and Alberta Montana interconnects, and delivery locations in partial Segment 21.

OUTAGE #	SEG #	OUTAGE DESCRIPTION	DATES		RECEIPT/DELIVERY IMPACT	CONTACT	AREA
			START	FINISH			
12	8	Clearwater #5 - Unit Maintenance (4 days).	10/24/16	10/27/16	Potential IT/FT receipt restriction in the Upstream James River Receipt Area, including full Segment 8. Capability 247 E6m3/d. Typical Flow 230-260 E6m3/d.	Chris Pho	USJR
13	21	NPS 42 Western Alberta System (WAS) Mainline Loop - Pipeline Maintenance (7 days). Capacity Revised	10/31/16	11/06/16	Potential IT/FT delivery restriction in the West Gate Delivery Area. Alberta B. C. Capability 57 E6m3/d. Typical Flow 57-64 E6m3/d.	Damola Daramola	WGAT
14	8	Nordegg C/S - Station Maintenance (4 days). New	11/01/16	11/04/16	Potential IT/FT receipt restriction in the Upstream James River Receipt Area. Capability 245 E6m3/d. Typical Flow 230-265 e6m3/d.	Chris Pho	USJR
15	20	NPS 12 Bigstone Lateral - Pipeline Modifications (6 days within window). Dates Revised	11/15/16	11/20/16	Nils required at Grizzly, Grizzly Sales and Bigstone Sales meter stations. Typical Receipt Flow 150 E3m3/d and Delivery Flow 50 E3m3/d.	Chris Pho	Local
16	6 & 12	NPS 24/30 NCC Peerless Lake/Marten Hills Lateral Loop #2/Paul Lake Crossover - Pipeline Maintenance (5 days). Dates Revised	11/25/16	11/29/16	Potential IT/FT receipt restriction in the Upstream James River Receipt Area. Capability 220 E6m3/d. Typical Flow 230-265 E6m3/d. Potential IT/FT delivery restriction in the East Gate Delivery Area. Empress/McNeill delivery Capability 125 E6m3/d. Typical Flow 125-135 e6m3/d.	Chuang Li	USJR EGAT
17	20	NPS 10/12 Tide Lake Lateral - Pipeline Modifications (6 days within window).	12/01/16	12/15/16	Nils required at Tide Lake North, Tide Lake East, Tide Lake B, Tide Lake and Tide Lake South meter stations. Typical Flow 260-660 E3m3/d.	Rahim Ruda	Local
18	10	NPS 36 NCC Loop and Fort McKay Mainline - Pipeline Maintenance (7 days). Dates Revised	12/05/16	12/11/16	Potential IT/FT delivery restriction in the Oil Sands Delivery Area. Capability 73 E6m3/d. Typical Flow 60-70 E6m3/d.	Rahim Ruda	OSDA

C/S Compressor Station
 M/S Meter Station
 Light Shade Changed Entry
 Dark Shade New Entry