Enbridge Offshore Pipelines

Natural Gas Infrastructure Conference

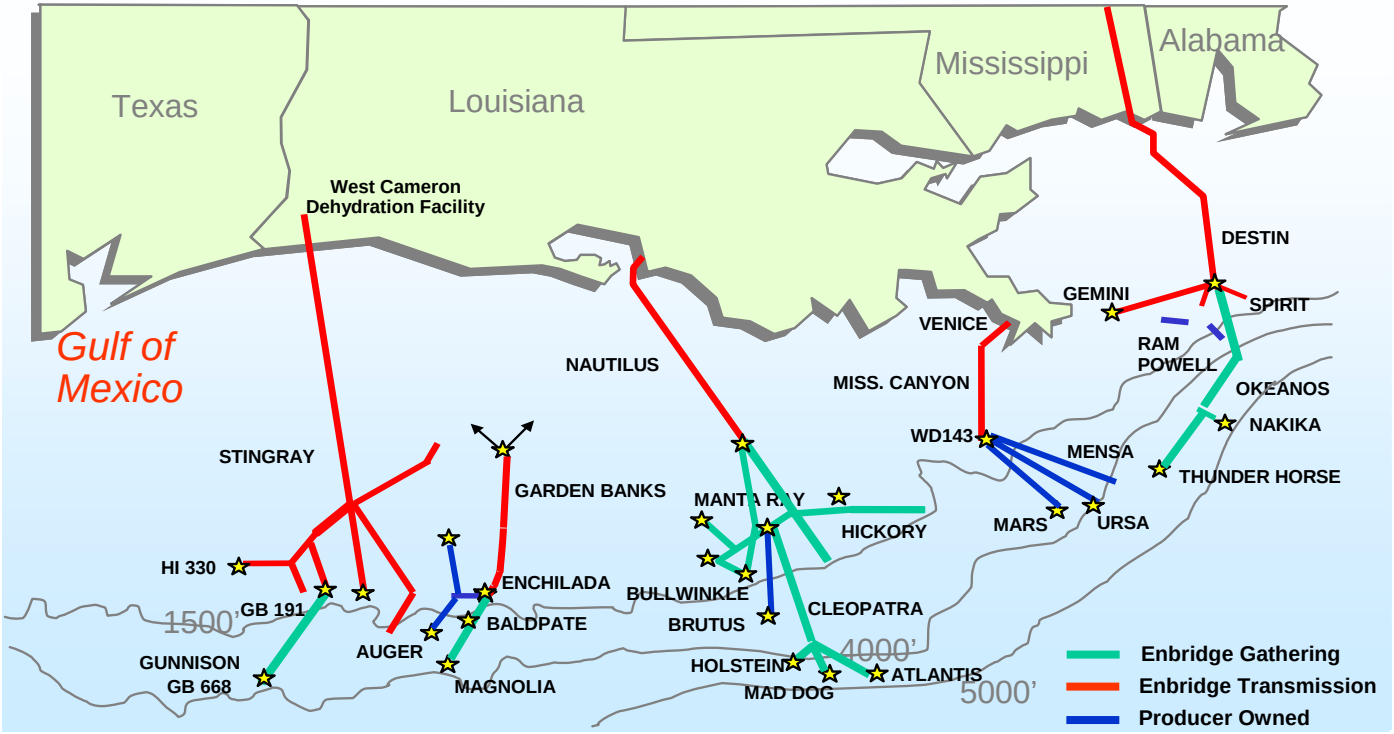
Hurricane Panel - Presented by David Halphen

Outline

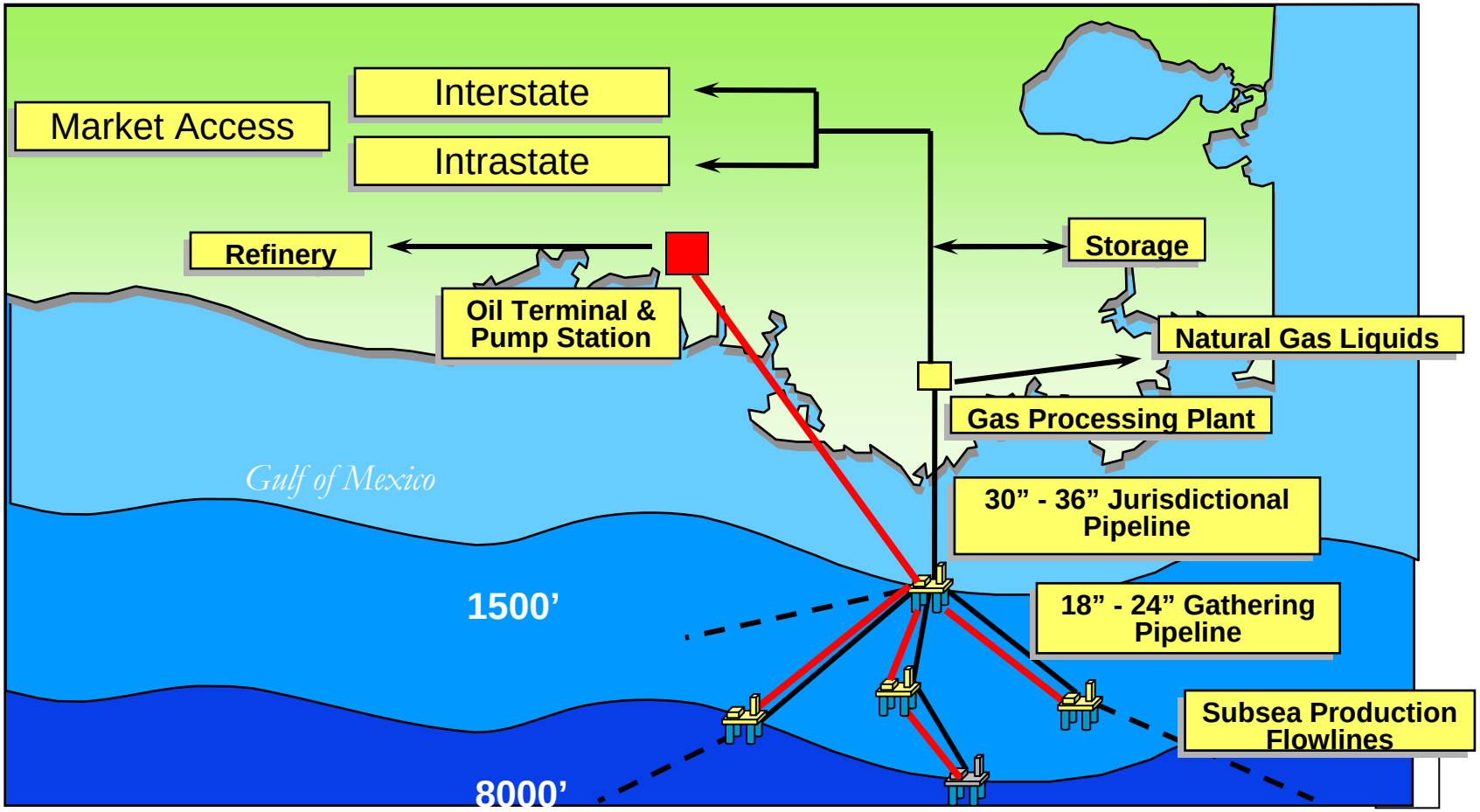
- Hurricane Timeline and Actions Undertaken
- Current Status of Enbridge Offshore Facilities
- Lessons Learned for Future Consideration

Transmission and Gathering

- 5 large supply aggregation corridor pipelines
- 1482 miles – Enbridge operates 1000 mi
- 4.7 BCF/D delivery capacity
- 7 partnership pipelines – Enbridge operates 4
- Connecting deepwater developments in up to 6500 ft. of water depth



Offshore Infrastructure Development



Hurricane Katrina & Rita

Katrina

Isolated damage to Enbridge assets

- primarily at Venice facility

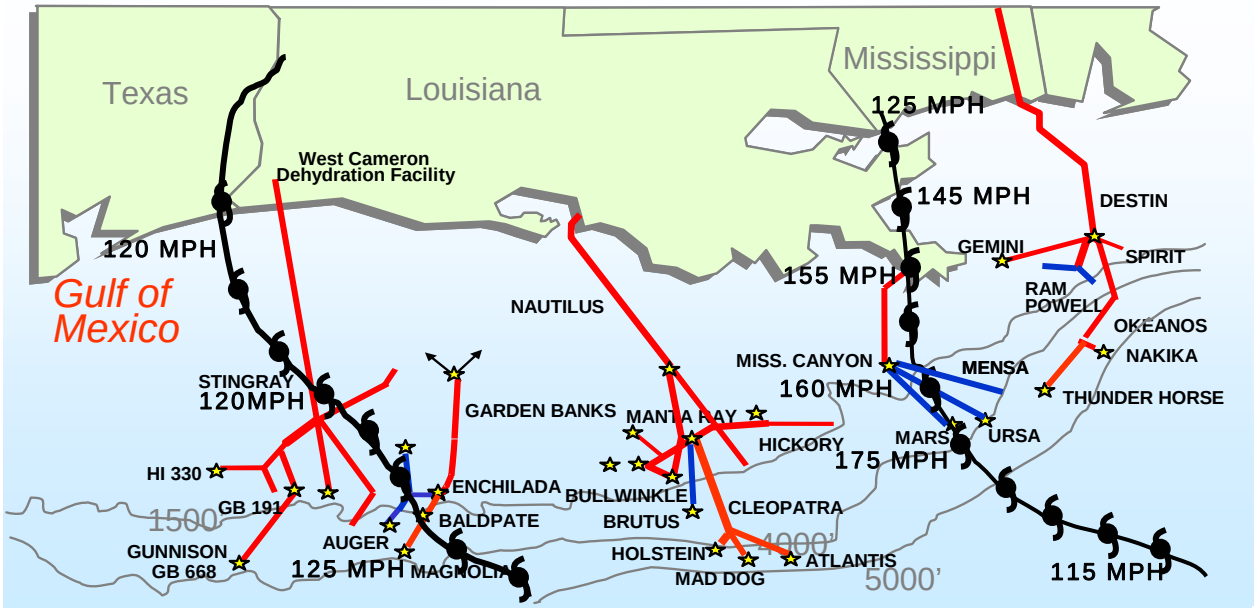
Shutdown of Mississippi Canyon

Curtailed Production on Destin

Rita

Currently assessing damage

Curtailed production on Stingray due to repair of onshore facility



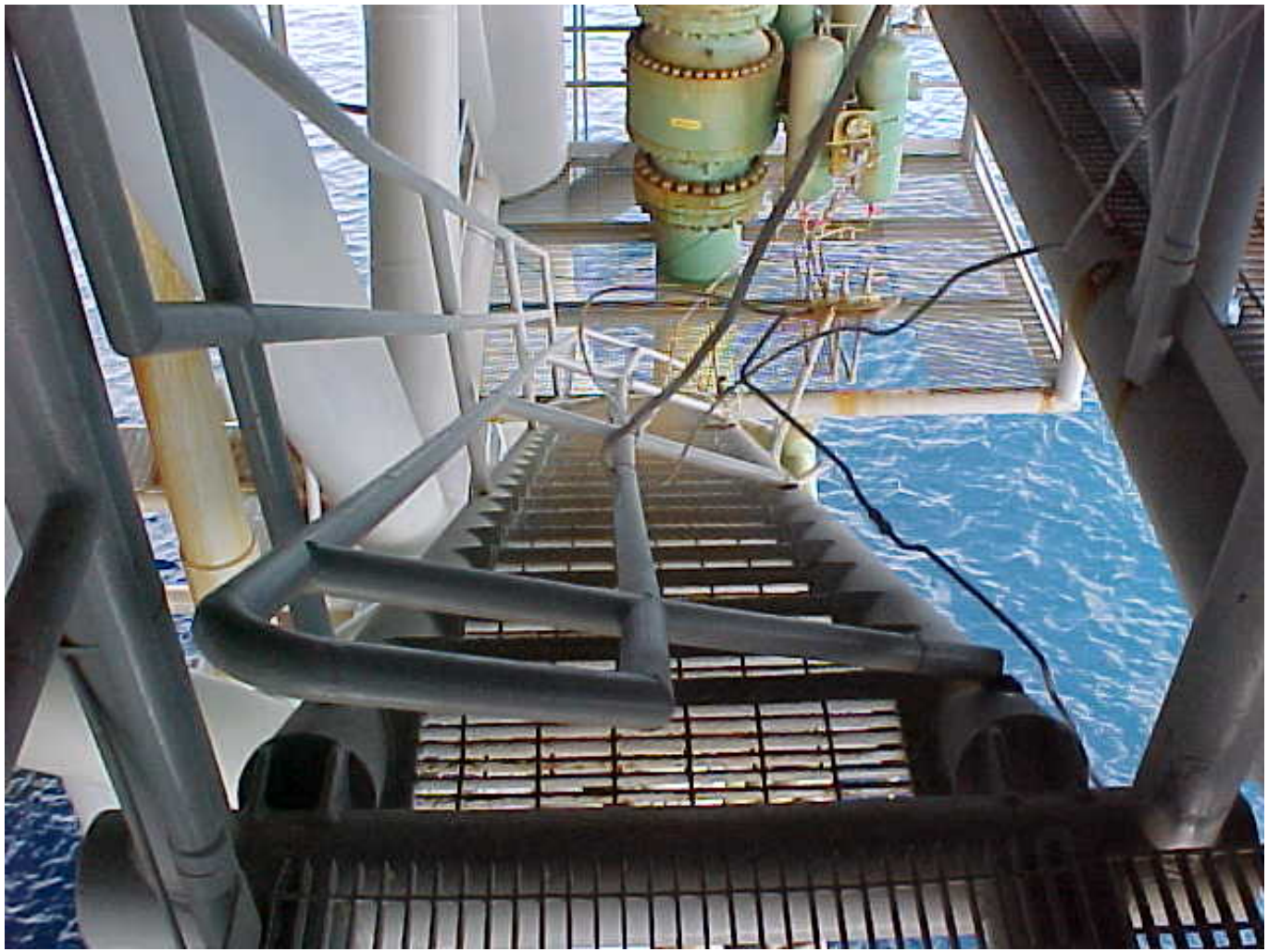
Katrina Flooding in South La.

Katrina Flooding at Venice Plant

Katrina Damage to Slug Catcher

Katrina Damage to Slug Catcher

Rita Damage to SS 332 Platform



Rita Damage to Stingray Onshore

Offshore Asset Positions

Corridor	Gas Pipelines	Jurisdiction	Diameter (inches)	Capacity MMcf/d)	Length (miles)	Owners
Stingray	Stingray UTOS	FERC FERC	4–36 42	1120 1200	325 30	EOP 50% and Mark West 50% EOP 100%
	Triton/Gunnison	OCSLA	4–16	275	55	EOP 50% and Mark West 50%
Garden Banks	Garden Banks Pipeline	FERC	30	1000	50	EOP 100%
	Magnolia	OCSLA	16	250	50	EOP 100%
Green Canyon	Nautilus	FERC	30	600	103	EOP 75% and Enterprise 25%
	Manta Ray	OCSLA	14/16/24	800	250	EOP 75% and Enterprise 25%
	Cleopatra	OCSLA	16/20	500	111	EOP 22%, BP 54%, BHP 22%, and Unocal 2%
Mississippi Canyon	Mississippi Canyon Pipeline	FERC	30	800	45	EOP 100%
Destin	Destin Pipeline	FERC	24/30/36	1200	385	EOP 33% and BP 67%
	Okeanos (portion under construction)	OCSLA	20/24	1000	100	EOP 33% and BP 67%
	Spirit	OCSLA	16	200	8	EOP 100%
	Total			7,745	1,482	