



Colonial Pipeline's Response to Hurricanes Katrina and Rita

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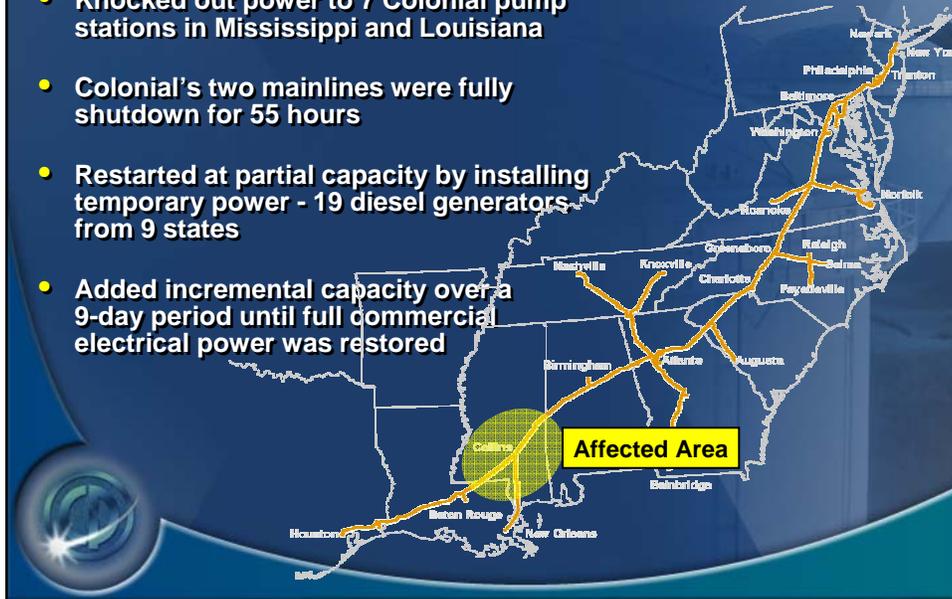
Colonial Pipeline Profile

- 5,519 mile system from Houston to New York Harbor; operating since 1963
- Delivers more than 2.4 million barrels/day petroleum products from approximately 30 refineries to more than 250 terminals
- 20 percent of all U.S. liquid product delivered by pipeline are handled by Colonial



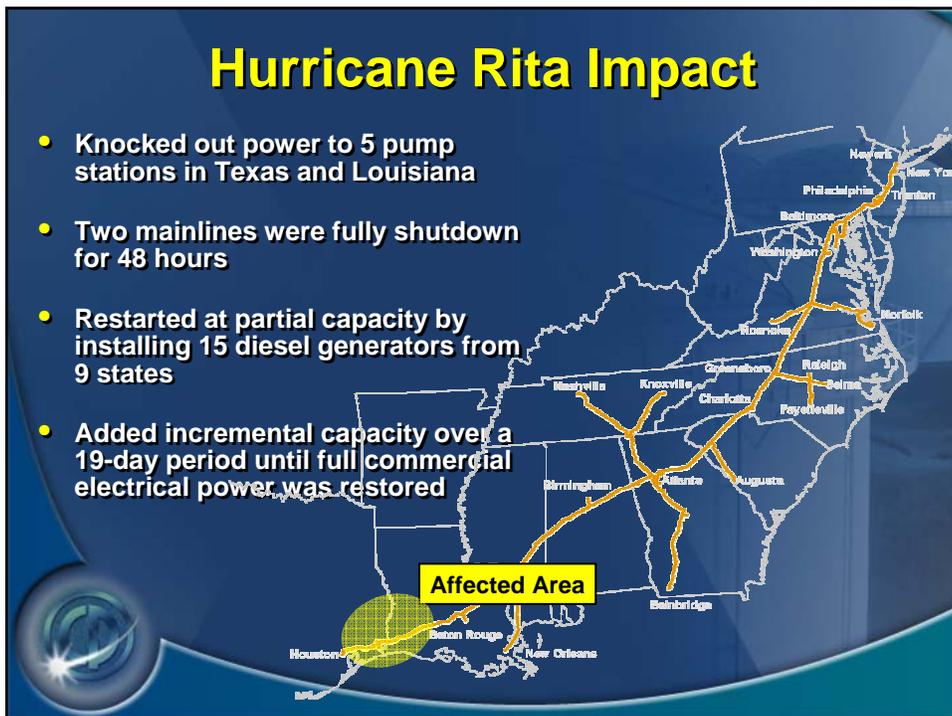
Hurricane Katrina Impact

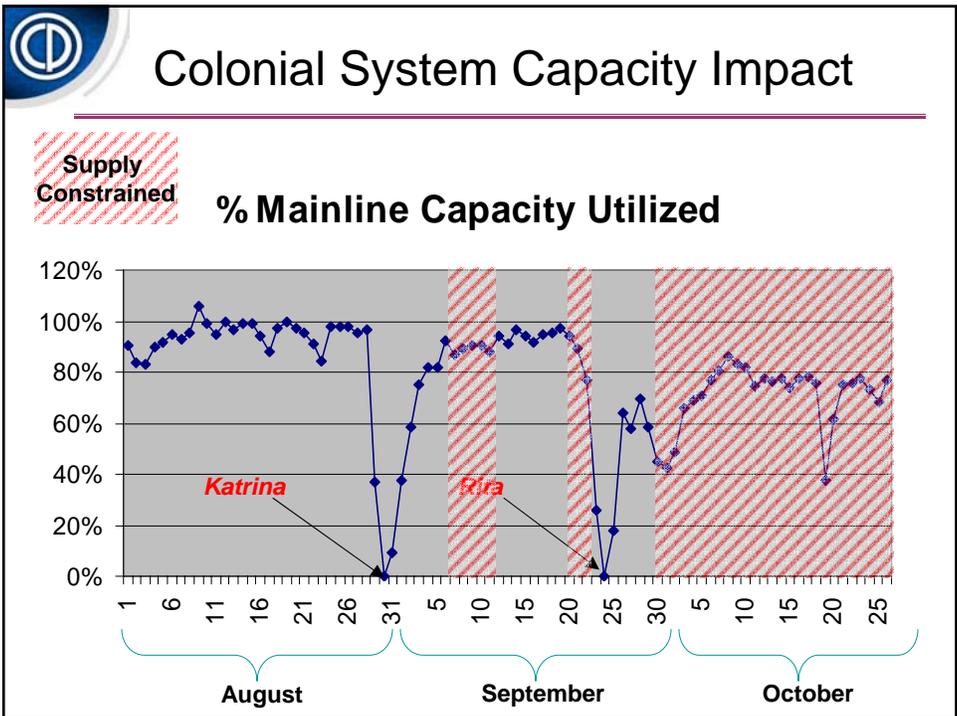
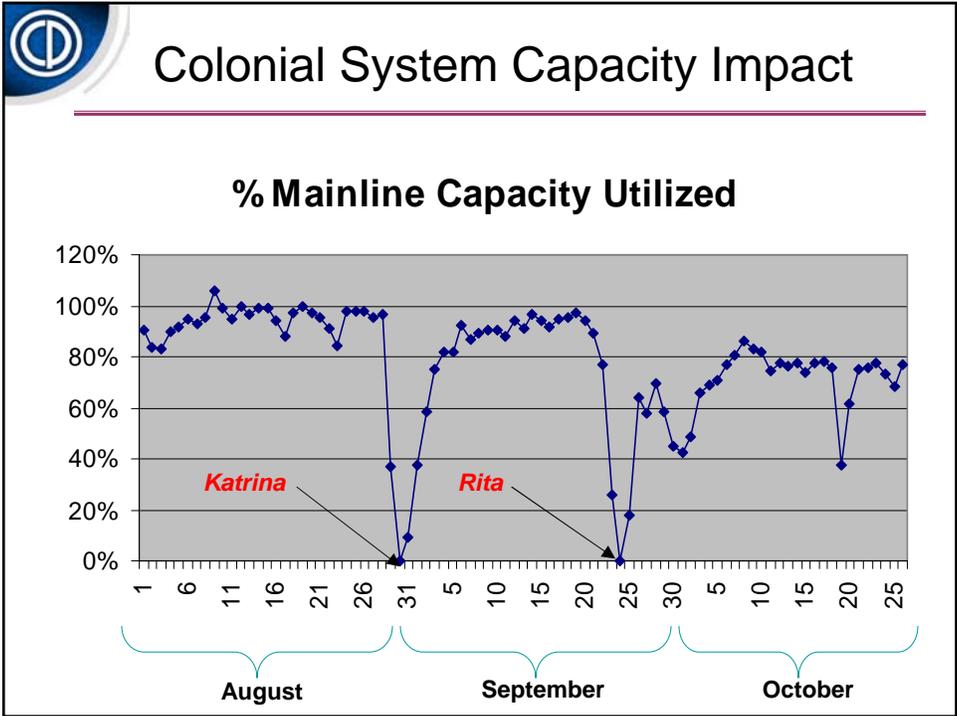
- Knocked out power to 7 Colonial pump stations in Mississippi and Louisiana
- Colonial's two mainlines were fully shutdown for 55 hours
- Restarted at partial capacity by installing temporary power - 19 diesel generators from 9 states
- Added incremental capacity over a 9-day period until full commercial electrical power was restored



Hurricane Rita Impact

- Knocked out power to 5 pump stations in Texas and Louisiana
- Two mainlines were fully shutdown for 48 hours
- Restarted at partial capacity by installing 15 diesel generators from 9 states
- Added incremental capacity over a 19-day period until full commercial electrical power was restored







Hurricane Preparedness Plan Set in Motion Prior to Landfall

Assets

- Began reviewing hurricane emergency plans with personnel in targeted region and Atlanta headquarters 5 days before landfall
- Secured tanks and facilities
 - Slowed pipelines prior to the storm
 - Ensured specific level of product in tankage
 - Dispatched satellite phones in anticipation of losses to normal communication

People

- Gathered contact information for all area employees
- Evacuated employees in MS and LA just prior to landfall
- Following landfall, all employees were contacted to confirm their safety; then maintained contact as they returned home and reported to work locations



Hurricane Rage





Aerial View of Downed Transmission Towers



Wind Damage, Flooding at Colonial Facilities





Incident Management: Baton Rouge, LA and Alpharetta, GA



Incident Command – Onsite

Crisis Management Team – Headquarters



Challenging Working Conditions





Teamwork & Coordination



Installing Distributed Generation





Successful Generator Installation



Lessons Learned: *Industry and Colonial*

Commercial Power Reliability

- Excellent response by most primary power suppliers; however, some utilities do represent risk to power reliability
- Colonial is evaluating redundant power supply options

Communications

- Communication was critical to manage Colonial's response effort
- Without land line and cell service, satellite phones provided good coverage initially; however, the network became quickly oversubscribed as emergency responders flocked to the area

Federal Relations

- Communication with federal agencies was critical to enable vital support in terms of waivers and escorts for generator transportation
- More clearly defined contact points within the federal government made Rita response easier than Katrina response (far fewer duplicate requests and clearer channel to contact government)



Lessons Learned: *Industry and Colonial*

Humanitarian Assistance

- Providing support to employees and their families *first* enabled them to then focus on Colonial restoration of service without distraction

Physical Security and Access

- Colonial hired private security for facilities and to serve as escorts for employees traveling to and from facilities.
- DOT assisted Colonial with providing escorts for generators as they traveled across the country

Aerial Reconnaissance

- Colonial contracted charter aerial patrol to assess damage to facilities and stage repairs
- Some other operators reported difficulty getting clearance to conduct similar flyovers; would be helpful if the FAA could determine priorities and inform companies of those priorities

Media Coverage

- Extensive media coverage created a high profile for the pipeline industry; This required focus on accurate, frequent, and proactive communication with regulators, customers, and the media



“Look for solutions to constraints
versus constraints to solutions.”