Security and Emergency Response Issues for the Refining and Petrochemical Industry

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AFPM
Who We Are

• Founded in 1902
• Represent over 95% of U.S. refining capacity and petrochemical manufacturing
• More than 400 member companies
  – Refineries
  – Petchem manufacturers
  – Service providers
Our Members

- U.S. petroleum refiners and petrochemical manufacturers (Regular Members)
- International refiners and petrochemical manufacturers (International Manufacturing Members)
- Industry-related businesses including construction, logistics, supply and contracting (Associate Members)
Security Issues:

- DHS Chemical Facility Anti-Terrorism Standards (CFATS)
- USCG Maritime Transportation Security Act (MTSA)
- Cyber Security
- Intel-Sharing/Info Sharing
- Disaster Recovery
- Drones
Emergency Response Issues

• Key Issues:
  – Power: electricity, fuel
  – Nitrogen for providing purge of system to clear pipelines

• Access:
  – Damage assessment for safety and to estimate return to normal (may take many days for correct estimate)
  – Access not just to analyze site but port/docks, rail and roads in/out of sites
  – Drone use should make this quicker

• Credentialing
  – Seems to be getting better
AFPM Engagement

• Security
• Annual Security Conference
• Active Security Committee
  – Chemical and Oil & Natural Gas Sector Councils
  – Members join port Area Maritime Security Councils (AMSCs)
  – Cyber Information Sharing and Analysis Centers (ISACs)
• DOE Exercises
  – ClearPath, Liberty Eclipse, and Cascadia Rising
Hurricane Preparedness at Refineries

- Many companies contract out with weather services to get up to date pin point forecasts
- Companies generally follow a timeline process
- Generally—tie down, raise up equipment, ride out crew left at site
- Biggest issue is employee safety after storm goes thru
- If really bad and enough time refineries may close down (shutter)—not complete shut down—can have a cascading affect on supply
Hurricane Preparedness at Refineries

- Companies have Gulf Coast Prep teams with members from TX and LA operations
- Members hold planning meetings in June to address issues like fuel, water, food, backup generators, etc
- Contract with relief assistance companies to provide food and shelter to rebuild sites, help employee families
Hurricanes and AFPM

- AFPM maintains an evergreen list of company hurricane contacts for each member—from high level VPs to emergency mangers that we update every year and have for years
- Act as middleman between agencies and companies as needed
- Helpful hurricane references on our website
- Developed hurricane preparedness paper in 2006 and guide in 2013
- Need greater coordination with states
AFPM Cybersecurity Subcommittee

• Established 2005
• A Subcommittee of the AFPM Plant Automation & Decision Support Committee
• 44 AFPM members
  – One of AFPM’s largest committees
  – Both Operating Companies and Vendor Companies Represented
• Cybersecurity presentations given at various AFPM conferences
• ≈50% of the Subcommittee have Security Clearances
Activities of AFPM Cybersecurity Subcommittee Members

- Infragard (San Antonio, Houston, Phoenix, Washington DC, Denver, Bay Area)
- DOE ONG SCC
- ISA SP-99 Committee
- ICSJWG
- ISA Security Compliance Institute
- DOE Cyber Security for Energy Delivery Systems (CEDS) formerly known as the National SCADA Test Bed (NSTB)
AFPM and Federal Government

- AFPM Staff represent its membership in many public-private forums
  - ONG SCC
  - Chem SCC
  - ICJSWG
  - NIST Framework
  - Liberty Eclipse
  - Development of *DOE Energy Sector Cybersecurity Framework Implementation Guidance*
  - USCG Gulf of Mexico Area Maritime Security Committee
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