



HURRICANE MATTHEW ANALYSIS SUMMARY

October 6, 2016; 1430 EDT

CURRENT CHARACTERISTICS:

Based on the October 6, 2016, 1100 EDT NOAA forecast:

- Hurricane Matthew is a Category 4 storm with maximum sustained winds of 140 mph.
Hurricane force winds extend 60 miles and tropical storm force winds extend 160 miles.
Hurricane Matthew is approximately 180 miles southeast of West Palm Beach, Florida and moving northwestward at approximately 14 mph.
The central pressure is 940 millibars.

KEY FINDINGS:

- Approximately 4,569,593 to 5,054,672 people may be affected by electric power outages in Florida, Georgia, South Carolina, and North Carolina.
A Hurricane Watch and a Tropical Storm Warning have been issued for the east coastal areas of Florida, Georgia, and South Carolina.
The Sectors most likely to be impacted locally are Commercial Facilities, Communications, Emergency Services, Energy, Healthcare and Public Health, and Transportation Systems.
Airport closures and damage to crops and farms could have national impacts.

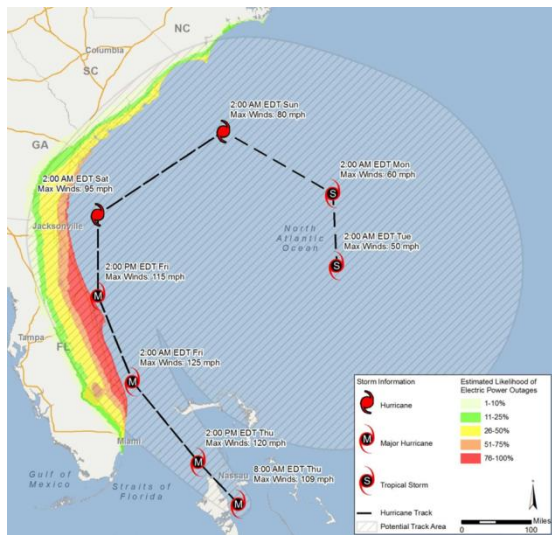


FIGURE 1—PROJECTED STORM PATH AND ELECTRIC POWER OUTAGES

ESTIMATED POWER OUTAGES

TABLE 1—EXPECTED POWER OUTAGES BY STATE

Table with 6 columns: State, 11-25 % Likelihood of Outage, 26-50 % Likelihood of Outage, 51-75 % Likelihood of Outage, 76-100 % Likelihood of Outage, Forecast Outage Range. Rows include Florida, Georgia, South Carolina, and North Carolina.

Facilities of Interest

- Florida Power and Light St. Lucie Substation
Jacksonville International Airport (JAX)
Orlando International Airport (MCO)
Lake Okeechobee - Herbert Hoover Dike System
Florida Department of Law Enforcement - Orlando Regional Operations Center
Charleston County Emergency Operations Center
Horry County Emergency Management Department and EOC

1 All estimations are based on 1100 EDT forecast from the National Oceanic and Atmospheric Administration - National Hurricane Center. Hurricane Matthew - Advisory Number 34. 1100 EDT October 6, 2016, http://www.nhc.noaa.gov/text/refresh/MIATCPAT4+shhtml/061143.shtml. Accessed October 6, 2016.
2 Based on OCIA electric power outage modeling as of October 6, 2016 0800 EDT NOAA NDFD Wind Fields.

TABLE 2—POTENTIAL IMPACTS BY INFRASTRUCTURE SECTOR

(U) Infrastructure	(U) Local/ Regional Impact Level	(U) National Impact Level	(U) Impact: <span style="color: green;">L</span> Low <span style="color: yellow;">M</span> Medium <span style="color: red;">H</span> High
Food and Agriculture	<span style="color: yellow;">M</span>	<span style="color: yellow;">M</span>	Transportation disruptions will make local distribution and availability of basic food supplies difficult. Heavy precipitation may damage crops still in the fields. Poultry and animal farms could be damaged from rain, wind, and electric power outages.
Banking and Finance	<span style="color: yellow;">M</span>	<span style="color: green;">L</span>	Local banking and ATM access disruptions in outage regions may result in delays. Processing insurance claims may also be delayed in outage areas.
Chemical: Plants	<span style="color: yellow;">M</span>	<span style="color: green;">L</span>	Some short-term regional impacts may be expected due to power outages and storm surge affecting 14 chemical plants in FL and GA.
Commercial Facilities	<span style="color: red;">H</span>	<span style="color: green;">L</span>	Retail and entertainment facilities will close for the duration of the storm and not re-open until roads are cleared and power restored.
Communications	<span style="color: red;">H</span>	<span style="color: green;">L</span>	Communication and Internet outages are expected to be localized due to power outages and downed telecommunication lines. Cellular outages are expected due to downed towers, misdirected antennas, and failures of battery backup-systems in power outage regions. Cable landings in FL are south of the hurricane impact zone.
Dams	<span style="color: yellow;">M</span>	<span style="color: green;">L</span>	There are no high hazard dams in the surge zone; the greatest risk will be from overland rainfall.
Emergency Services	<span style="color: red;">H</span>	<span style="color: green;">L</span>	Demand for emergency services could be significant, but hindered due to road closures and communication interruptions. The National Guard may be activated to cover some services.
Energy: Electric Power	<span style="color: red;">H</span>	<span style="color: green;">L</span>	Electric power generating plants with a capacity of 23 giga Watts are in the hurricane zone including 1 nuclear plant. There are 279 transmission substations in the hurricane impact zone.
Energy: Natural Gas	<span style="color: green;">L</span>	<span style="color: green;">L</span>	Some natural gas compressor stations could be interrupted, but natural gas should continue to flow.
Energy: Petroleum	<span style="color: yellow;">M</span>	<span style="color: green;">L</span>	Some disruption could occur due to delays in receiving product by sea. Available fuel stocks are sufficient to avoid severe shortages of fuel. FL law mandates backup generation for many gas stations.
Hospitals	<span style="color: red;">H</span>	<span style="color: green;">L</span>	Any outages are assumed to be mitigated by backup generation, which should sustain them through the outage. 33 hospitals have evacuated. There are 2 hospitals and 23 nursing homes in areas where storm surge may exceed 3 feet.
Transport: Airports	<span style="color: red;">H</span>	<span style="color: yellow;">M</span>	The following airports may close due to the hurricane: FLL, JAX, MCO, PBI, and SFB. MIA is south of the projected hurricane and could remain open. Regional airports in area also will also close.
Transport: Road/Rail	<span style="color: red;">H</span>	<span style="color: green;">L</span>	Debris will cause road closures. There are no tunnels in potential inundation areas. 5 Amtrak stations in FL are in the hurricane impact zone and Amtrak has ceased operating in the hurricane impact zone.
Transport: Ports	<span style="color: yellow;">M</span>	<span style="color: green;">L</span>	Ports in Jacksonville, Palm Beach, and Port Canaveral FL and Brunswick, GA may close prior to the storm's arrival.
Water: Drinking & Wastewater	<span style="color: green;">L</span>	<span style="color: green;">L</span>	No regional or national impacts expected.

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