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Early hurricane intelligence can save your wind turbine system - are you ready?

Current storm prediction models forecast a hyperactive 2020 hurricane season and it may only get worse. An average storm season has 12 named storms, six hurricanes and three major hurricanes. The latest model from The Weather Channel predicts the 2020 season will see 18 named storms, nine hurricanes and four major hurricanes of Category 3 or higher.

"The hiatus of robust winter cold fronts oozing out of the Arctic allowed Gulf water to warm as much as 4 degrees above normal," notes Todd Crawford, a senior meteorologist with The Weather Channel, which recently released its 2020 hurricane season forecast.

Crawford said The Weather Channel may update its storm numbers even higher before the June 1st start of hurricane season, based on the unusually warm waters of the Gulf, Caribbean and parts of the Atlantic.

"The wildcard is if we get a La Niña or not," Crawford said. "There is still a lot of uncertainty, but the ocean temperatures are a slam dunk it's going to be pretty warm."

The warm winter in the southeast was partly the result of a record-strong Arctic Oscillation, which steel-belts the jet stream at northern latitudes, trapping colder air above it.

A positive Arctic Oscillation also forces the jet stream into a more orderly straight line that helps contain the frigid polar vortex as opposed to an undulating pattern that would allow Arctic air to seep south.

Another indication of a more active hurricane season is the lack of an El Niño and higher expectations that a La Niña could develop during the August to October peak of hurricane season. While an El Niño tends to reduce tropical systems with higher wind shear, a La Niña is more conducive to storm activity.

The 2020 Weather Channel forecast closely resemble 2010, a year that saw 19 named storms and two unnamed tropical depressions.

Wind is good, but too much of a good thing can cause problems for wind turbine owners who rely on their systems to operate and remain resilient under the most demanding of conditions. Building on the commercial grade, robust construction of the **Superwind** line of turbines, **Mission Critical Energy** has developed a number of strategies to help keep your wind turbines and remote off grid sites up and running during extreme wind events.

These include both operational strategies (such as our recommended **Superwind** emergency operational procedures https://missioncriticalenergy.com/wp-content/uploads/2019/09/SB-0016-19-246-SW-Emergency-operation-under-high-winds.pdf) as well as remote command and control options.

Our SW35X-ARS remote stop switch (https://missioncriticalenergy.com/sw35x-ars/) enables **Superwind** turbine user to manually or autonomously shut down wind turbines during extreme wind events. Combined with our FlexSCADA line of remote monitoring and control systems https://missioncriticalenergy.com/flex-scada/about-flexscada/, **Superwind** owners have a solid strategy for maintaining operation before, during and after extreme weather events.

For assistance in developing a heavy weather strategy for your off-grid site or vessel, please contact our team of Off-grid Power specialist at Mission Critical Energy at (716) 276-8465 or online at www.missioncriticalenergy.com .