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Aviation, Aerospace & Transportation
Unmanned Aircraft Systems (UAS)

September 26, 2016

New FAA Statutes and Rules for Commercial Drone Operations will Benefit Utilities

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New FAA rules broadly authorizing commercial drone operations are now in effect and the utility sector stands to benefit significantly. The new rules provide utilities the opportunity to utilize drones to reduce costs and increase worker safety. Additionally, new federal legislation enacted last month may provide a framework for utilities to take advantage of both special privileges and protections related to drone operations in the future.

On August 29, 2016, the Federal Aviation Administration's (FAA) final rules took effect governing the commercial use of small drones (also known as small unmanned aircraft systems or sUAS). The drone rules, also known as Part 107, will implement clear requirements and parameters for the commercial use of sUAS – replacing the unduly burdensome Section 333 exemption process. Click here for more information regarding the transition from the old system. The utility and energy industries, which are increasingly using sUAS for operations and maintenance, stand to benefit significantly from Part 107.

In addition to the Part 107 commercial sUAS rules, this summer also saw the enactment of the FAA Extension, Safety and Security Act of 2016 (the "Extension Act"). The new law contains two provisions that may ultimately grant the utility and energy sectors an alternative route to operate drones for their own projects while providing an option to prevent other drone operations near their critical facilities. While these provisions may be beneficial for utilities in the future, the FAA has yet to develop the corresponding policies implementing the provisions.

The Part 107 Commercial Drone Rules and Waivers for Operations Beyond the Scope of Part 107

The Part 107 rules apply to all commercial sUAS weighing 55 lbs or less, and broadly permit operations by all commercial sUAS users, including utilities that can use drones to monitor energy generators, transmission lines and distribution stations, as long as the operations are performed within certain operational and operator limitations. These new rules require visual-line-of-sight operation during daytime hours, prohibit flights above individuals not directly involved in the operation, limit operations to a speed of 100 mph and an altitude of 400 feet (or within 400 feet of a structure), and create a new pilot certificate that can be obtained by commercial sUAS operators after passing an aeronautical test and after pilots are

vetted by the Transportation Security Administration. For a detailed analysis of the Part 107 Commercial UAS rules, click here.

Significantly, all commercial users can apply for a waiver of certain requirements of Part 107 if the applicant can demonstrate that a drone will be operated in a safe manner. Waivers may prove to be a valuable resource for utilities. Possible waivable provisions of Part 107 include:

- speed and altitude limitations;
- prohibition against flying the sUAS above individuals not directly involved in the commercial operation for which the sUAS was launched; and
- operations beyond the visual-line-of-sight.

When the Part 107 rule took effect in late August, the FAA website opened up a portal through which applicants can begin the individual review process to obtain a waiver and operate beyond the parameters outlined in Part 107.

Another Route for Energy Industry sUAS Operations: Section 2210

The newly enacted Extension Act including Section 2210 requires that the FAA create and implement a system through which commercial users can use drones to survey and monitor critical infrastructure facilities beyond the visual-line-of-sight and at times that would otherwise be prohibited. Once the process for Section 2210 is established, utilities and others in the energy industry have more flexibility to respond to manmade or natural disasters or to respond to other incidents that threaten critical infrastructures.

Until Section 2210 is implemented, utilities can seek waivers under Part 107 to monitor critical infrastructure. As the FAA develops a process for operations under Section 2210, the differences and potential advantages of this provision versus Part 107 will become clearer.

Protecting Critical Energy Facilities from Unwanted Drone Operations

While recognizing the value of using sUAS to meet their own business and regulatory compliance needs, companies in the energy sector have also identified the potential privacy and security challenges raised by proliferation of sUAS flights near their facilities. Based on the possibility for accidental overflight or surveillance, utilities are exploring options for drone defenses. For more information on drone defense, click here.

A separate provision in the Extension Act begins to address this concern. Section 2209 lays out a framework that will eventually allow critical infrastructure owners, including energy production, transmission and distribution corporations, to apply for a designation from the FAA to prohibit or restrict the operation of UAS in close proximity to a fixed site facility. The FAA is required to develop a process by which owners of such facilities can apply for and receive a designation that will create a boundary around facilities in order to protect national security and homeland security. The language of the statute specifically mentions the energy industry, along with oil refineries and chemical facilities. So far, the FAA has not yet developed the application process for preventing operations under Section 2209.

Applications for Utilities

The Part 107 rules will provide significant benefits to the utility industry. The new FAA rule provides for electric utilities to use drones as a cost-effective way to inspect remote transmission facilities, substations and distribution systems as well as other facilities or their components that are not readily accessible. Gas

utilities can also make use of drones to inspect and/or monitor above-ground pipelines and storage facilities. Such inspections can be performed as a part of on-going maintenance or in connection with specific problems. The use of drones should enable utilities to improve worker safety, reduce operational costs associated with on-site inspections and more quickly determine the cause of malfunctions or other problems. Utilities would also need fewer personnel and vehicles on the ground, thereby decreasing real and overhead costs.

With expanded flexibility through the Part 107 waiver program utilities will be able to:

- operate drones at higher altitudes, thereby expanding the view of generating facilities, switchyards, substations, transmission lines and other facilities, leading to increased efficiencies;
- operate a drone over individuals not directly involved in the commercial operation for which the drone was launched, thereby expanding the permissible viewing areas; and
- operate a drone beyond the visual-line-of-sight. This is particularly helpful because it has the potential to significantly increase operational efficiency by allowing utilities to remotely survey remote facilities located on vast operational areas and to identify potential threats to operation.

Although the FAA has not yet provided any details for implementing the provisions of Section 2210, the potential implications for the utilities sector are significant here as well. Once the FAA develops the application process, utilities will be in a unique position to take advantage of Section 2210 because the Extension Act specifically applies to protecting “critical infrastructure.” As such, FAA may give utilities the authority to fly under Section 2210 without a Part 107 waiver, potentially benefiting the utilities and energy sector. These industries would be in a position to use commercial drones beyond the visual-line-of-sight and at night in response to natural or manmade disasters, to inspect and repair facilities, or to continuously monitor remote facilities.

Finally, many utilities and energy sector corporations see the potential difficulties associated with sUAS operations by others near facilities. Defense from unauthorized and unwanted operation is a priority, and the statutory language in Section 2209 may provide an additional tool for preventing the theft of trade secrets or protecting employees and infrastructure.

Moving Forward

The new Part 107 rule marks a major advancement in U.S. drone policy and opens up numerous opportunities for the energy and utility sector to integrate sUAS into their ordinary business operations. Through waivers, new laws, upcoming regulations for large UAS (over 55 pounds) and micro UAS (under 4.4. pounds), and technical advancements, the opportunities to utilize drones will continue to expand over the coming months and years.

If you have any questions about the content of this alert, please contact the Pillsbury attorney with whom you regularly work, or the authors below.

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