OFFICE OF UTILITIES REGULATION

Regulating Utilities for the Benefit of All

OUR recommends fixes to JPS' system following August outage

(KINGSTON, Jamaica; 2017 May 31): The Office of Utilities Regulation (OUR) has made several recommendations to the Jamaica Public Service Company Limited (JPS) following a detailed analysis of circumstances surrounding the all-island power outage of August 2016.

The OUR said in its report released on 2017 May 4, that JPS should ensure that adequate measures are introduced to forestall and prevent the recurrence of identified problems associated with the 2016 August 27 system shutdown, including the issues associated with the performance of certain Independent Power Producers' (IPP) generation facilities. The OUR also urged, as a matter of priority, that the JPS reviews the current switching procedures and safety rules and establish appropriate systems to ensure compliance.

The OUR further instructed JPS to "urgently review the policies and procedures governing all communication between System Control and Field Personnel to ensure greater accountability" and to maintain a sound records management and storage system to ensure that all communications between the system control centre and other operations personnel can be properly recorded and protected so that records can be accessible to the regulator in future to facilitate necessary investigations and audits.

This was the second occasion in 2016 that the electricity system experienced a major failure, the first having occurred on 2016 April 17.

The OUR also took the opportunity to reiterate that JPS should implement the recommendations coming from the OUR's investigation of the 2016 April 17 System outage, in accordance with the approved Action Plan.

Among the OUR's investigation team findings are that:

- The system shutdown was caused by the failure of the system Operator's maintenance personnel to remove a 'short and ground' that was installed on the 69 kV Transmission System at the Port Authority substation to facilitate maintenance work at the substation.
- The primary protection scheme failed to trip the relevant circuit breaker and clear the fault as was expected.
- The relevant back-up protection scheme failed to clear the fault as was expected.
- The non-functioning of a number of important communication systems during the system shutdown affected the early analysis of the problem and therefore delayed restoration activities.

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BACKGROUND:

At about 5:45 pm on Saturday 2016 August 27, a fault on the JPS 69 kV transmission system between the Port Authority of Jamaica and Hunts Bay substations resulted in unstable voltage and frequency conditions. These unstable conditions in turn precipitated the tripping of all generating units online and consequently a total system failure.

The full report of the OUR's investigation can be found on its website: <u>www.our.org.jm</u>. The report on the 2016 April 17 power outage can also be found on the OUR's website.

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