

Message

From: Liisa Hardie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=8147DD6EA1D74743AC5B3E04B01BCAB7-LIISA HARDI]
Sent: 2017-11-10 1:46:51 PM
To: Jeannette Briggs [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=148095610f7242f48a5a9da24b1a8a87-Jeannette B]
CC: Mag Wadie [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3565d157e4e64113a28450e609a181e1-Mag Wadie]
Subject: RE: Answer required ASAP for Ontario Fair Hydro Presentation on Monday

Hi Jeanette,

Hope the below helps.

As an integral part of IESO's business continuity management program, the IESO disaster recovery plan describes the technology continuity management framework and strategies associated with the recovery of IESO critical systems and services (including Bulk Electric System (BES) Cyber Systems, Electronic Access Control or Monitoring Systems (EACMS) and Physical Access Control Systems (PACS) after a major disaster or declaration affecting the production data centre.

The Disaster Recovery Plan (DRP) defines the key activities, resources and strategies required to effectively recover IESO systems and services consistent with critical business recovery time objectives in the support of critical business functions.

The primary goal of DR planning is to enable IESO to survive and overcome a disaster and to effectively re-establish critical business operations within defined maximum tolerable outage timeframes.

The objectives of the disaster recovery plan are to maintain plans and procedures, qualified staff and technology for recovery that:

- Allow IESO to re-establish critical business systems and services within agreed maximum tolerable recovery times and data loss tolerances (Recovery Time Objective (RTO)) and Recovery Point Objective (RPO) respectively;
- Comply with regulatory and other external obligations related to systems recovery and risk mitigation, such as the Critical Infrastructure Protection Standard CIP-009-6 of the North American Electric Reliability Corporation (NERC) ;
- Facilitate effective co-ordination of recovery tasks; and
- Identify, implement and document ongoing initiatives to validate (i.e. test) the disaster recovery plans.

Business continuity management (BCM) focuses on those actions the IESO must take to recover and/or restore its critical business operations due to a major incident that directly affects its facilities, equipment, staff and/or technology.

BCM has three main components, the third of which is the subject of this disaster recovery plan:

Crisis Response - The process that enables IESO to effectively manage, respond to and recover from incidents that may threaten IESO staff, property and/or continuity of critical operations.

Business Continuity Planning – The planning required so that IESO can maintain or restore critical business processes and services in a timely fashion due to an incident; thereby mitigating the financial, legal, reputational, or other negative consequences that may arise.

Disaster Recovery (DR) – The process to manage recovery from incidents that impact the IESO's technology environment and the business processes and services it supports. Recovery includes regaining access to applications, data, communications, workspace, and other IESO systems and services.

The recovery would include IESO systems, networks, applications, data, physical environments, some of which relate to recovering IESO's critical cyber systems per the NERC Critical Infrastructure Protection critical cyber security Standard CIP-009-6.

We conducted a disaster recovery test in September, 2017. The test was deemed successful with issues, we are tracking the issues to closure. A tabletop exercise of the DR plan was conducted prior to the DR test, which was successful.

Tests are assessed on the following:

Conduct a DR and BC exercise that will fail over critical systems and services required to monitor and direct the IESO-controlled grid and the IESO administered market.
ITOPS SCEs, the Control Room Operations and some back office staff (i.e. System Performance and Models, MF&I) will operate their critical functions in production mode for a minimum period of 12 hours from the Backup Control Centre.
All other IESO business areas continue to work from Clarkson, validating access to critical applications / systems at the Back-up Data Centre.
Back-office support groups will be staffed in the BOC dedicated space in the Control Room Support room adjacent to the backup Control Room.
Satisfy IESO's BCM Policy testing obligation (i.e. "at least once a year"), and in support of the Control Room's testing obligation (semi-annually at the BOC) and IT's ongoing Failover Testing program.
Restore (i.e. fall forward) the systems and services back to Clarkson, thereby resuming normal operations there.
Conduct the exercise while minimizing internal and market facing business impacts (e.g. MF&I outage assessments, Settlements MTRs and NODs, # of manual dispatches) and optimizing IT staff utilization.
Exercise all BOC network BCAs in accordance with NERC CIP-009 and show evidence of such.

Liisa

From: Jeannette Briggs
Sent: November 09, 2017 5:36 PM
To: Bill Hipple; Liisa Hardie
Subject: RE: Answer required ASAP for Ontario Fair Hydro Presentation on Monday

Okay I got some great info from the CSAE 3416 highlighted in red but I am missing question 3 as there is only testing described in the report for control 18 back-up and recovery so anything you can provide Liisa would be appreciated.

1. Please describe the core IESO financial reporting system
2. How is operating system maintenance performed? What procedures and backup systems are available?
3. Please describe the IESO disaster recovery and business continuity plans. What was the success of the last test? How are tests assessed?
4. Please describe the frequency of a full-system backup
5. Describe the IESO's future technology initiatives

Regards,

Jeannette Briggs Director, Settlements - Corporate Services
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Corporate Services collaborates with you to deliver solutions and expertise that enable the IESO to achieve its goals

From: Jeannette Briggs
Sent: November 09, 2017 1:22 PM
To: Bill Hipple; Liisa Hardie
Cc: Anthony Martinello
Subject: RE: Answer required ASAP for Ontario Fair Hydro Presentation on Monday

Banks and Rating Agencies

Regards,

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From: Bill Hipple
Sent: November 09, 2017 1:19 PM
To: Jeannette Briggs; Liisa Hardie
Cc: Anthony Martinello
Subject: RE: Answer required ASAP for Ontario Fair Hydro Presentation on Monday

Jeannette,

What is your target audience and what are you trying to achieve with the information?

Treasury is a cloud based system that we subscribe to a service. We are not allowed to share their infrastructure as per our NDA.

Infor-Lawson and CRS are internal systems and depending on whom you are talking to will determine the answers.

Thank you,

Bill Hipple | Ontario IESO | Manager – I&TS; Business Solutions; Revenue, Metering and Settlements Systems Support | t 905-403-6956 | c 416-951-7604 | f 905-855-6373

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Please consider our environmental responsibility before printing this email.

From: Jeannette Briggs
Sent: November 09, 2017 12:41 PM
To: Bill Hipple; Liisa Hardie
Cc: Anthony Martinello
Subject: Answer required ASAP for Ontario Fair Hydro Presentation on Monday
Importance: High

Bill/Liisa

Can I please ask you to respond to the following questions for CRS/Lawson/Treasury:

1. Please describe the core IESO financial reporting system
2. How is operating system maintenance performed? What procedures and backup systems are available?
3. Please describe the IESO disaster recovery and business continuity plans. What was the success of the last test? How are tests assessed?
4. Please describe the frequency of a full-system backup
5. Describe the IESO's future technology initiatives

I apologize for the short time line request but we need this for a Monday morning presentation

Regards,

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