

## PRELIMINARY NOTIFICATION - REGION III

February 29, 2012

### PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-12-002

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. Some of the information may not yet be fully verified or evaluated by the Region III staff.

#### **Facility**

Byron Unit 1  
Exelon Generation Company, LLC  
Byron, Illinois  
Docket: 50-454  
License: NPF-37

#### **Licensee Emergency Classification**

Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

SUBJECT: BYRON UNIT 1 LOSS OF OFFSITE POWER AND DECLARATION OF A NOTICE OF UNUSUAL EVENT

#### DESCRIPTION:

At 5:31 p.m. (CST) on February 28, 2012, Byron Station declared a Notice of Unusual Event (NOUE) following a loss of offsite power that affected Byron Unit 1. The loss of offsite power caused both Unit 1 station auxiliary transformers (SATs) to de-energize. Each unit has 2 SATs that convert offsite power for use by onsite safety and nonsafety-related equipment. Once the loss of offsite power occurred, the emergency diesel generators automatically started as designed to supply power to the safety-related equipment. The nonsafety-related loads automatically transferred to both Unit 1 unit auxiliary transformers and, as a result, Unit 1 remained operating at full power as designed. At the time of this preliminary notification, Byron Unit 1 remained in a NOUE.

NRC Region III supported the resident inspectors and closely followed the event and the licensee's actions to restore offsite power.

A Region III electrical specialist was dispatched to the site on February 29 to assist the resident inspectors in the follow-up of the licensee's assessment of the equipment problem and other aspects of this event. The licensee identified that a broken insulator in the switchyard was the direct cause of the problem and the insulator is being replaced.

Unit 2 continued to operate at full power during the event.

The state of Illinois, the state of Wisconsin, and FEMA were notified.

Region III received initial notification of this occurrence by telephone call from the Senior Resident Inspector. The information presented herein has been discussed with the licensee, and is current as of 1:30 p.m. on February 29, 2012.

ADAMS Accession Number ML12060A386

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