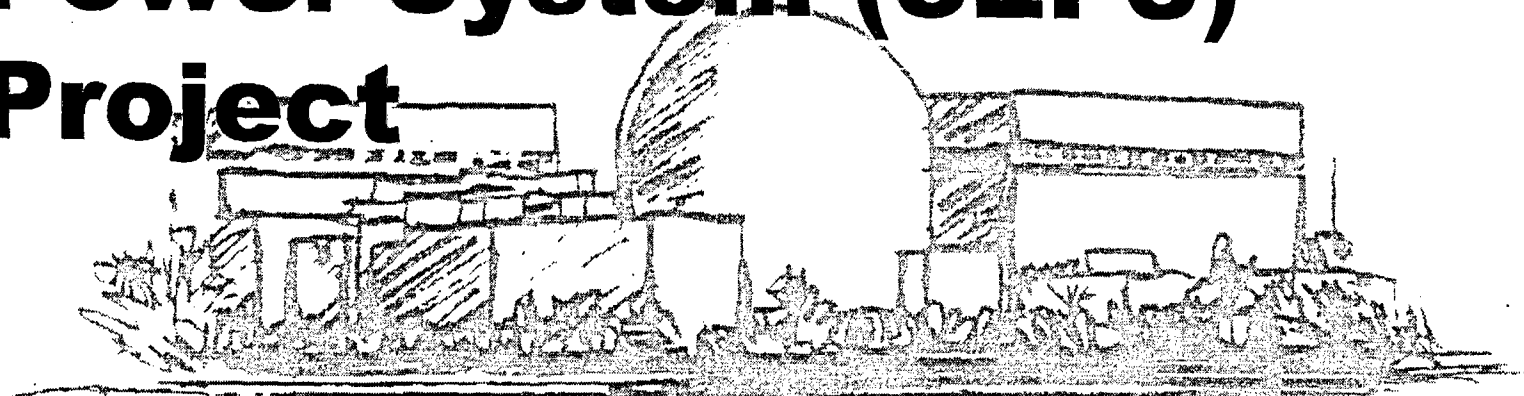


Supplemental Emergency Power System (SEPS) Project



Seabrook Station
NRC Presentation
June 12, 2003



FPL Energy
Seabrook Station

SEPS Project Team Members

- Greg Kann - Project Manager
- Ken Letourneau - Project Engineering Manager
- Mike O'Keefe - Licensing Supervisor
- Renée-Nicole Leclerc - Licensing Lead
- Jim Hill - Operations Lead
- Larry Rau - Risk Management Supervisor
- Carl Bible - FPL Project Office

Supplemental Emergency Power System (SEPS)
June 12, 2003 Presentation to the NRC



FPL Energy
Seabrook Station

Meeting Objective

- Brief NRC staff on Supplemental Emergency Power System (SEPS) Project
- Initiate dialog on the project and schedule



FPL Energy
Seabrook Station

Overview

- Supplemental Emergency Power System (SEPS) provides defense-in-depth for the emergency AC power system
- Lower core damage frequency
- Combined with an extended AOT will allow focused maintenance and improved EDG reliability



FPL Energy
Seabrook Station

Project Description

- Provide a reliable backup standby electrical supply for a loss of all AC event



FPL Energy
Seabrook Station

Design Concept

- Two permanently installed non-safety DGs and switchgear
- Connect to plant busses by permanently installed cables
- Supply emergency 4.16 kV bus E5 or E6 by switching operations
- SEPS available on an as needed basis



FPL Energy
Seabrook Station

Licensing Precedent

■ Waterford

- A similar Technical Specification change (10 Days AOT) was granted to Waterford on July 21, 2000 (Amendment No 166 to NPF-38)

■ Crystal River

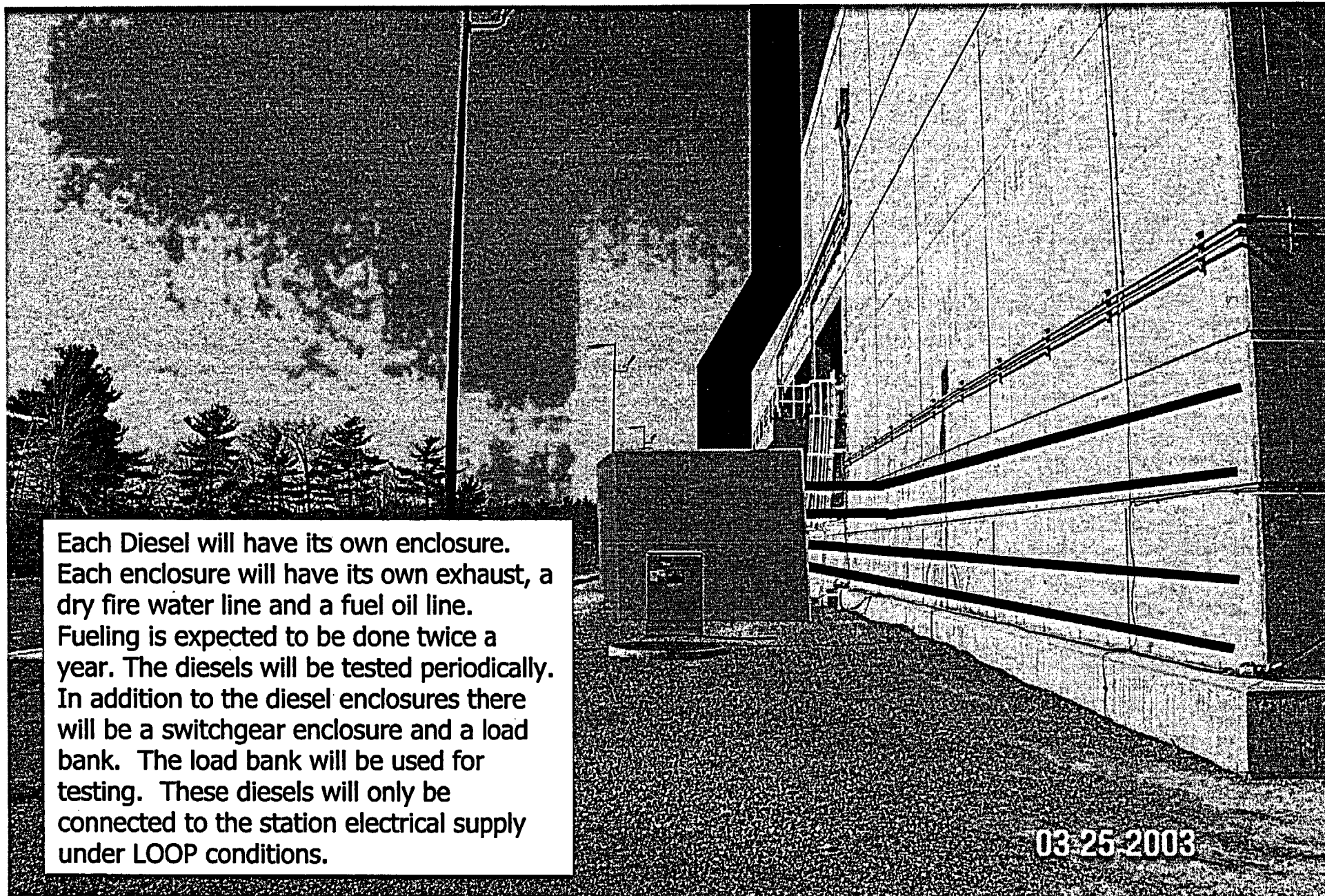
- A similar Technical Specification change (14 days AOT) has been requested by Crystal River on March 20, 2003 (TAC No. MB5616)



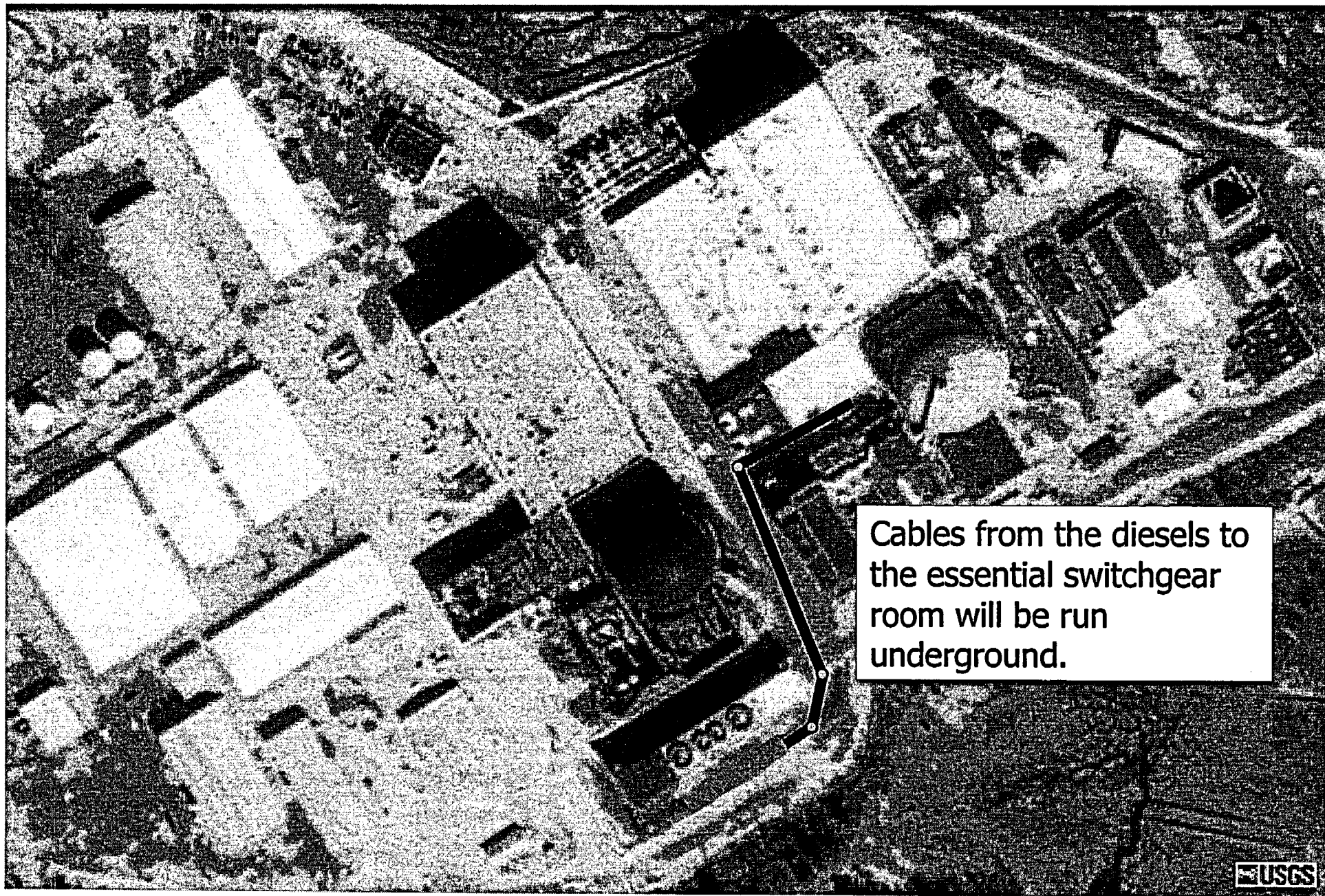
FPL Energy
Seabrook Station

Proposed Design

- Two non-safety diesel generators approximately 2.5 MW each
- Share Unit 1 services (electrical, fire detection, security, lighting etc.)
- Permanent electrical connections to safety busses
- Manual transfer capability between Train A & Train B
- Manually connected using switching operations
- Automatic load sequencing with minimal manual load shedding (in accordance with EOPs)

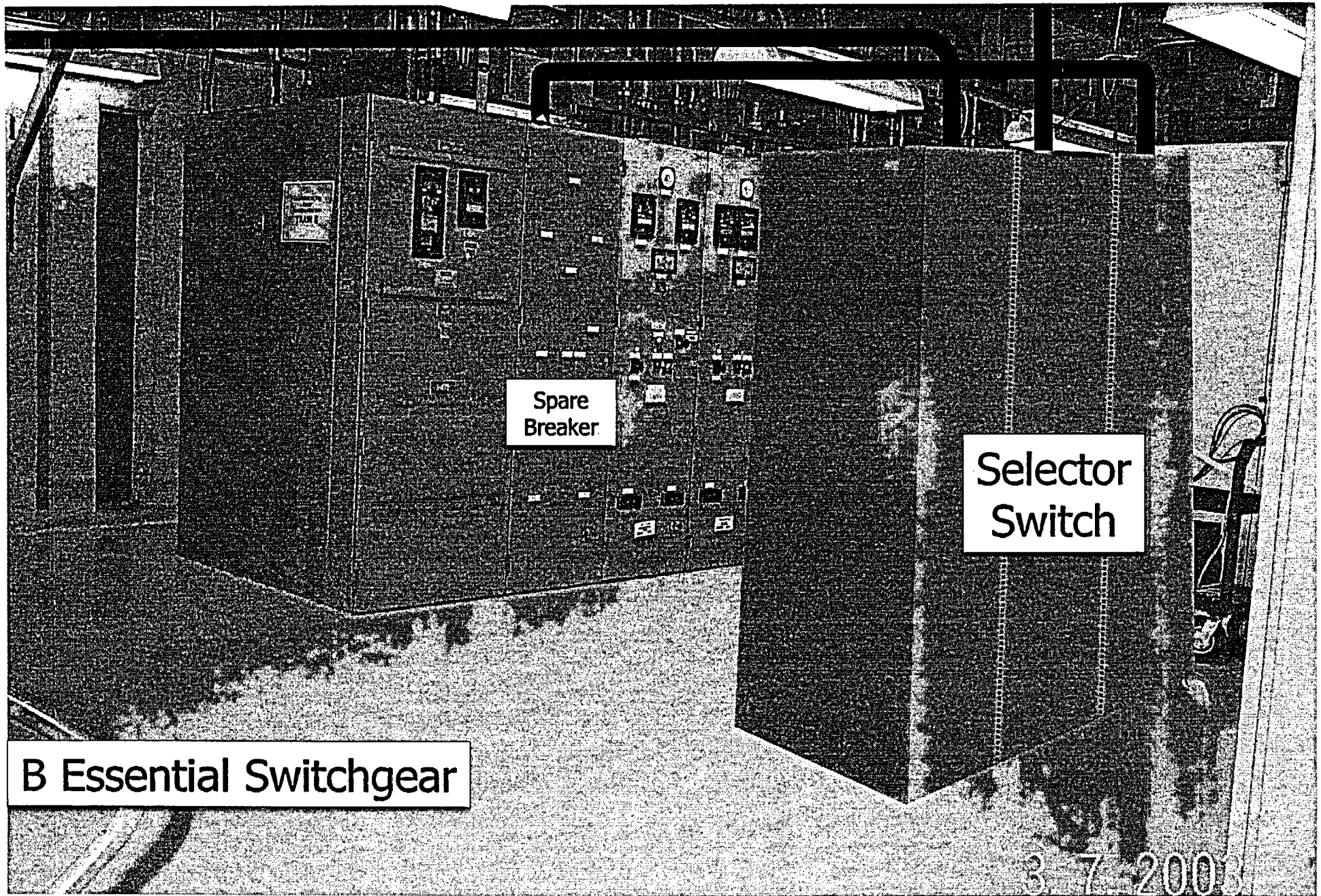


Each Diesel will have its own enclosure. Each enclosure will have its own exhaust, a dry fire water line and a fuel oil line. Fueling is expected to be done twice a year. The diesels will be tested periodically. In addition to the diesel enclosures there will be a switchgear enclosure and a load bank. The load bank will be used for testing. These diesels will only be connected to the station electrical supply under LOOP conditions.



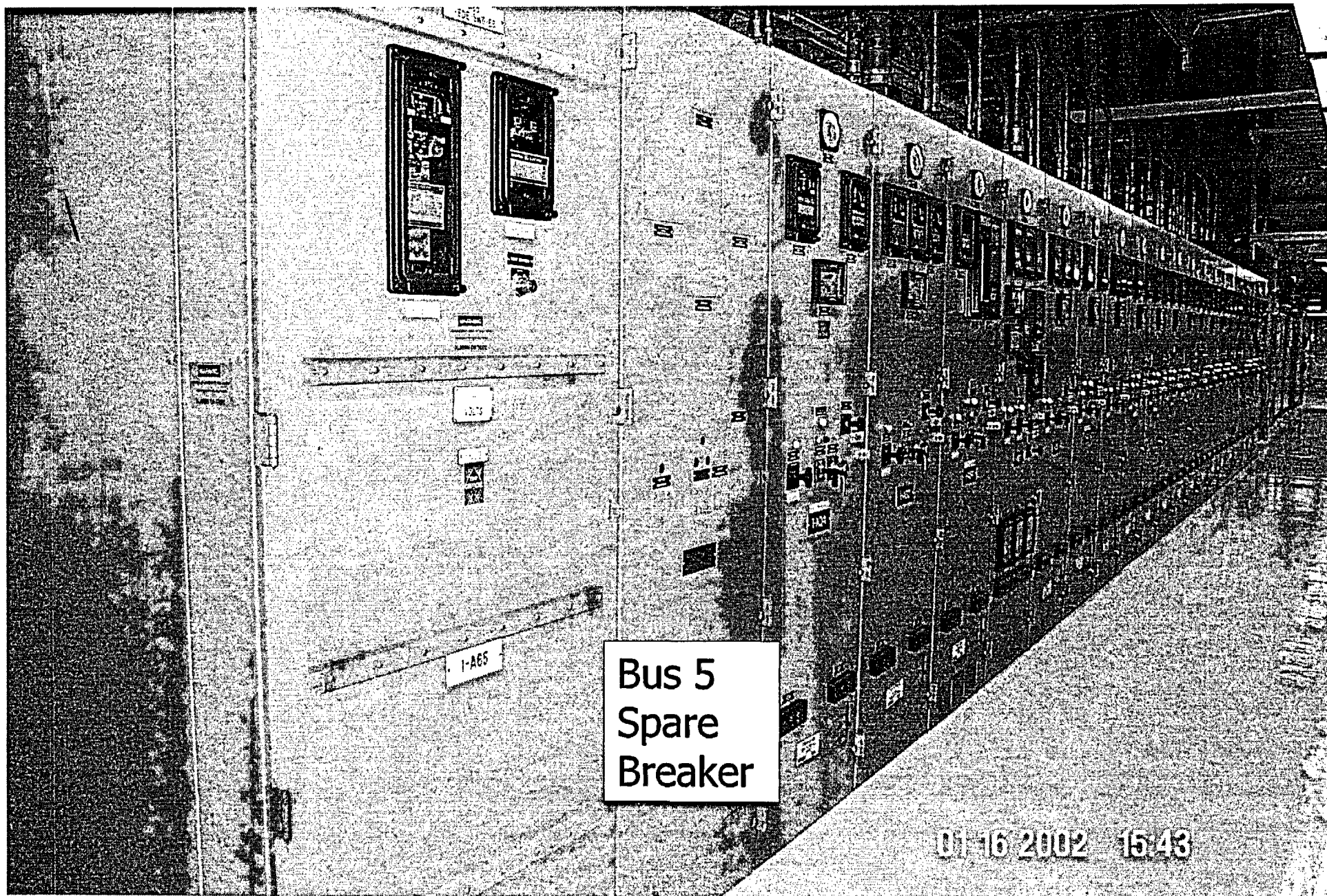
Cables from the diesels to the essential switchgear room will be run underground.

USGS



B Essential Switchgear

Supplemental Emergency Power System (SEPS)
June 12, 2003 Presentation to the NRC



Supplemental Emergency Power System (SEPS)
June 12, 2003 Presentation to the NRC



FPL Energy
Seabrook Station

Attributes

- Has capacity for safe shutdown loads
- Lower core damage frequency (Approximately 30% reduction from baseline)
- Allows for an extended EDG AOT to perform maintenance
- On-line maintenance facilitates greater focus on EDGs



FPL Energy
Seabrook Station

Availability

- The SEPS will be included in the Technical Requirements Manual as being available
- The SEPS will be monitored periodically in accordance standard industry practices



FPL Energy
Seabrook Station

Tech Spec Change

- EDG allowable outage time increase from 72 hours to 14 days when SEPS is available

Project Schedule



FPL Energy
Seabrook Station

Milestones:

Review Electrical Loads	2/14/03 Complete
Develop Preliminary Engineering	4/1/03 Complete
Develop Project Plan	4/1/03 Complete
Project Approval	4/7/03 Complete
LAR Submitted to NRC	8/29/03
SORC Approval of DCR	2/11/04
Work Package Planning Complete	4/23/04
Field Work Starts	6/28/04
LAR Received from NRC	8/27/04
SEPS Available	10/21/04



FPL Energy
Seabrook Station

Meeting Summary

- SEPS will improve defense-in-depth for the emergency AC power system
- Improves Core Damage Frequency by approximately 30%
- Submit LAR on August 29, 2003