

**MEMORANDUM FOR THE RECORD**

**SUBJECT: 23DET01 Commercial Power Loss**

**Description of the problem:**

On July 8, 2023, at 1530 and on August 16, 2023, at 0730 and 1230 commercial power to the Minto Fish Facility was temporarily lost. Minto Fish Facility is dependent entirely upon electrically operated pumps for water circulation in order to sustain fish life. Without the normally provided commercial power, backup diesel generator power is required to provide water to the facility.

On July 8, the permanently installed backup generator failed to automatically transfer power due to a faulty transfer switch, requiring a USACE operator to arrive onsite and manually transfer power. Post the July 8 incident, a temporary 125-kVA portable generator was installed on July 13. During both instances of power loss on August 16, onsite ODFW staff were required to start the 125-kVA temporary generator.

**Type of event:**

Commercial power loss, backup generator automatic transfer failure.

**Impact on facility operations:**

USACE staff electricians may not always be available within the critical time window to complete a manual transfer of power to the permanently installed backup generator. Safety certifications are required to perform the transfer due to high voltage hazardous energy. The temporary 125-kVA portable generator can only provide minimum flows needed to sustain fish health in the facility.

**Expected impacts to fish:**

If all power to the facility is lost for a period of more than 45 minutes; impacts to all fish at the facility, including ESA listed species, are expected to result in catastrophic loss.

**Corrective Actions:**

As a result of the July 8 transfer failure, new transfer switch parts have been ordered with an estimated delivery date of 14 September. The temporary 125-kVA portable generator has and will provide emergency power until the new transfer switches are installed and in operation.

Long term solutions including the engineering of a transfer system not dependent upon a proprietary logic controller for the automatic transfer of power are being considered. A service plan for the permanently installed backup generator to improve reliability is also in development.

**Comments from agencies:**

No Additional Comments.

Please email with questions or concerns, thank you.

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Sincerely,  
Project Fisheries