Q. Re: 2013 Capital Projects Over 200,000 but less than 500,000: p. D-51 1 2 Replace Automatic Transfer Switches: 3 What repairs or steps were taken following each of the incidents referred to at the top of page D-52? 4 5 6 7 A. The automatic transfer switches failed to transfer to the emergency power 8 supply (diesel generator) during an outage and failed to return to the normal supply 9 when the power was restored. 10 March 13, 2003 11 12 Personnel at Hinds Lake transferred supply to the diesel generator and checked out 13 the issue with the switch. The problem was found to be in the friction drive on the 14 breaker control motor. The friction drive mechanism was removed and taken to 15 Western Steel in Deer Lake to have a replacement part manufactured. The new 16 part was installed. No additional actions were taken following this occurrence. 17 18 **September 13, 2005** 19 Investigation found that the motor friction drive mechanism was slipping when the 20 motor was operating. Personnel tightened the drive screw on the friction drive 21 mechanism and tested the emergency supply breaker and normal supply breaker in 22 transfer switch 83.1. Both breakers operated properly. No additional actions were 23 taken following this occurrence. 24 25 August 30, 2006 26 The emergency breaker for automatic transfer switch 1 failed to operate. 27 Adjustments were made to the set screws on the emergency breaker. Station

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1 service was transferred to the emergency diesel and returned to normal supply. 2 No additional actions were taken following this occurrence. 3 October 12, 2005 4 5 The automatic transfer switches' timing relays were not functioning correctly. As a 6 result, the emergency diesel would not shut down as anticipated after the cool 7 down period. The investigation revealed that timing relay 10TDR did not operate. 8 A new timing relay installed and the function tested. No additional actions were 9 taken following this occurrence. 10 April 28, 2009 11 12 Upon inspection, it appeared that the motor for Transfer Switch 1 MSE was not 13 operating. The breaker was opened manually and remaining transfer scheme 14 operated. The motor for MSE in Transfer Switch 1 was removed. Brushes were

removed, cleaned, and re-seated. The motor was then bench tested for forward

and reverse operation. The motor was placed back in service and station service

transferred to emergency and back to normal supply.

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