

FFT Summary

Caribou Audit - July to October 2015

Entity	NBCRN	EUBVTN	Standard	Req	Compliance Issue	Risk Assessment	Mitigation Action
Caribou Wind Park Limited Partnership (Caribou)	NBCR004	2015003	PRC-005-1.1b	R2	During a compliance audit conducted by NPCC from July 27, 2015 through October 9, 2015, it was discovered that Caribou, as a Generator Owner (GO), had a compliance issue related to PRC-005-1.1b R2. PRC-005-1.1b requires that GOs that own generator protection systems provide evidence that devices are maintained and tested according to their maintenance and testing program. Caribou self- identified gaps within their generator protection system maintenance records and reported the compliance issue through the audit process. Caribou did not perform testing on 8 current transformers (CTs) within the 5 year interval specified in its maintenance and testing program.	This compliance issue posed a minimal risk and did not pose a serious or substantial risk to the reliability of the bulk power system. No harm is known to have occurred as a result of the compliance issue. Caribou is a 99 MW wind farm and was fully tested during commissioning of the wind farm in 2009. The battery charger in question has a built in ground fault alarm monitor and requires no manual testing. The system was inspected every month and any alarms associated with a DC ground showing on the battery charger alarm screen can be recorded in the comments form. No failures of the DC system occurred during the audit period. Caribou's CT maintenance interval of 5 years is more stringent than the current	To mitigate the compliance issue: 1) on July 24, 2015, Caribou completed outstanding 5-year interval testing for CTs and monthly DC ground checks were updated to require documentation for DC ground checks. 2) on January 31, 2016, Caribou implemented a computerized maintenance management system to address newer version PRC-005-2 implementation. The system supports periodic scheduling and tracking of maintenance activities. Caribou also reviewed current work orders to ensure sufficient detail is included such as a full equipment list and required maintenance activities 3) on January 31, 2016, Caribou developed a transition plan for PRC-005-2 to ensure all future test intervals consider all

Entity	NBCRN	EUBVTN	Standard	Req	Compliance Issue	Risk Assessment	Mitigation Action
					The compliance issue started on January 1, 2015 and ended when Caribou tested its CTs on July 2, 2015. Caribou did not document battery ground check test results. Caribou's maintenance and testing program requires monthly battery checks, including ground checks, but the battery monthly check maintenance sheet did not specifically require documentation for ground checks. The cause of this issue was CHD's misinterpretation of the full scope of requirement R2.	PRC-005 standard in effect (12 years). Caribou has no previous violations or FFT remediated issues relating to PRC-005-1.1b R2.	applicable equipment and new/changed testing requirements. It will be followed by updating work orders as needed. 4)) on August 6, 2015, Caribou trained operating staff on the compliance issue and the corrective actions to ensure no similar issues occur in the future. The training included a review of the maintenance and testing program.