

NRC Question Response Form

Request Number:

Status:

Requested By (Inspector name): Jean TrefethenDate Requested:Question / Document Request: ☒ Q / ☐ D (circle one)System:Detailed Question or Request:

- 1-Confirm that the generators were placed back in service in December 2013.
- 2-How many days (approximate) did the steam generator replacement activities take to complete (e.g. 80 days)?
- 3-How many additional workers were used to complete the combined maintenance and refueling outage?
- 4-Confirm that the steam generators were moved from the barge via a self-propelled transporter to a temporary building, which housed the replacement steam generators until they were ready for installation.
- 5-Confirm that in addition to temporary warehouses, that a large crane and transfer cart that was set up outside the containment equipment hatch were used during the steam generator replacement.
- 6-Confirm that no construction activities took place on previously-undisturbed land.
- 7-What mitigations did you use to reduce environmental impacts (e.g. used best management practices, such as seeding and wetting disturbed areas, using multi-person vehicles for the workforce to reduce the total passenger vehicles miles.)?

Initiated By (individual taking the request): Gene EckholtAssigned To (Person responding to request): Scott MartyDate Assigned:**CAP / Work Order Issued?** ☒ Yes / ☐ No (circle one) Number: **01443632**

CAP 01443632 was written to document that the need for an additional archeological survey was not evaluated/documented when the Steam Generator Replacement (SGR) Parking Lot storm water retention basin size was increased during construction. Work activities did not identify any cultural resources and subsequent surveys in the surrounding areas did not identify any cultural resources.

Response (include a list of documents provided):

- 1-Confirm that the generators were placed back in service in December 2013.
- The Replacement Steam Generators (RSGs) were in-serviced on December 16, 2013 when they were accepted by Operations as being available for decay heat removal per shutdown safety assessment and Technical Specifications. Prairie Island Nuclear Generating Plant Unit 2 was placed back in service with the RSGs on January 3, 2014.

2-How many days (approximate) did the steam generator replacement activities take to complete (e.g. 80 days)?

The Steam Generator Replacement Outage (2R28) was completed in 104 days. The majority of the Steam Generator replacement activities took place during a 77 day period starting with turnover of the polar crane to the installation vendor on September 30, 2013 and ending with in-servicing of the RSGs on December 16, 2013.

3-How many additional workers were used to complete the combined maintenance and refueling outage?

Approximately 830 workers were needed to perform the Unit 2 Steam Generator Project activities. This was in addition to the normal 450 refueling outage workers.

4-Confirm that the steam generators were moved from the barge via a self-propelled transporter to a temporary building, which housed the replacement steam generators until they were ready for installation.

The RSGs were moved from the barge via a self-propelled transporter to a storage building constructed to house the replacement generators until they were installed. After the Steam Generator Replacement project was complete, the storage building was retained and has been turned over to the Plant for future use.

5-Confirm that in addition to temporary warehouses, that a large crane and transfer cart that was set up outside the containment equipment hatch were used during the steam generator replacement.

Handling of the Steam Generator parts outside of the containment was performed using an Outside Lift System (OLS) and Hatch Transfer System (HTS). The OLS is comprised of a girder supported by two columns; the loads are lifted and lowered using a jacking system mounted on the girder. The HTS is comprised of an elevated platform with sliding carts for moving components out of and into Containment. A service crane was also erected outside the Containment to assist with rigging activities such as removal and restoration of the existing platform and erection and dismantling of the OLS.

6-Confirm that no construction activities took place on previously-undisturbed land.

During the planning for the Steam Generator Replacement Project it was identified that some construction activities would take place in areas that were previously undisturbed and also in areas outside those previously identified as potentially impacted by the Unit 2 Steam Generator Replacement (NUREG-1437, Figure 3-1). Xcel Energy met with the Prairie Island Indian Community (PIIC) to discuss these activities and the areas affected. These construction activities were performed in accordance with Xcel's Archaeological, Cultural and Historic Resources plan (FP-CY-ENV-01) and survey results were provided to the PIIC; no cultural material was identified during the survey or the execution of the work. During preparation of this reply, a concern was identified with failure to adequately address the need for additional surveys when the size of a retention pond was increased; this issue has been entered in the plant's corrective action program for evaluation.

7-What mitigations did you use to reduce environmental impacts (e.g. used best management practices, such as seeding and wetting disturbed areas, using multi-person vehicles for the workforce to reduce the total passenger vehicles miles.)?

Environmental Impacts: Storm Water Pollution Prevention Plans (SWPPP) were developed for all ground disturbing activities and appropriate permits were obtained. Best Management Practices (BMPs) employed included silt fences, seeding and mulching. In addition, new trees were planted to off-set trees removed from the new laydown area as required by local permitting. After the Steam Generator Project, the temporary parking area constructed to support the workers needed for the SGR activities was removed and the area has been re-seeded; a newly constructed laydown area was retained and has been turned over to the Plant for future use.

Transportation Impacts: Xcel Energy met with the PIIC and local agencies to coordinate and implement appropriate measures to mitigate transportation impacts during the Unit 2 Steam Generator Replacement Project. The mitigations included directions to employees for entry and exit routes from the site, addition of temporary traffic control signs, operation of a shuttle bus between PIIC and PINGP and staggering of shift start times.

Is this an equipment issue that affects plant operability? ☐ Yes ☒ No

If yes, contact the Shift Manager immediately. _____

Date/Contacted By

Completed By: [Signature] Date Completed: 8/26/14
 Peer / Tech Review / Validation By: Sam Chestnut Date Completed: 8-26-2014
 Team Leader / Supervisor Review / Approval: Engene Eckhardt Date Completed: 8/26/14

Additional Info Attached? Yes / No [forward a copy to Regulatory Affairs]

NRC Question Response Form

Reviewer Verification Guidance

- Data Requests:
 - Is the information provided complete? Was any material removed from the information provided?
 - Is the information provided correct? Was the preparer of the response a subject matter expert?
- Information Requests:
 - Does the response answer the question being asked? Is the response on topic and clear?
 - Are inputs and assumptions appropriately validated?
 - If there is an embedded calculation, is the math correct?
 - Is the response well formulated? Was enough work put into the response?
 - Does the response reflect a differing professional opinion between the preparer and the inspector? Is the response professional in tone? Is the response argumentative?
 - Is there a condition adverse to quality? Has a CAP been initiated?