a Babcock Power Inc. company

SUCCESS STORIES

# MID WESTERN UTILITY

## PROJECT OVERVIEW

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|---|---|
| **Materials** | 4,880,110 (SF) of Agru 40 MicroDrain Liner<br>4,880,110 (SF) of Watershed Geo ClosureTurf |
| **Start Date** | June 1st, 2020 |
| **Completion Date** | November 24th, 2020 |

## SUMMARY OF WORK


Ameren decided to close the RCPA (Ash Pond) at the Rush Island Energy Center by capping and leaving the CCR materials in place as authorized by the regulations. The CCR Rule authorizes the use of an alternative final cover system for closure, provided such system meets equivalent performance requirements. Alternative final systems comprised of synthetic turf material have demonstrated equivalence with the prescriptive final cover requirements in solid waste applications.

Benefits of an alternative cover system application include reduced cover system costs when soils would otherwise be required to be imported, reduced environmental impact from haul trucks, a potential reduced construction timeframe, improvements to stormwater discharge quality, ability to accommodate settling / subsidence, and reductions in post-closure care maintenance.

A final cover system (ClosureTurf® over LLDPE geomembrane) was installed over re-graded existing ash within the Ash Pond. The general contractor compacted the ash subgrade with a smooth drum roller prior to deployment of the LLDPE geomembrane.

## OUTCOMES AND BENEFITS

The final cover system helped conserve onsite borrow soils, reduce construction costs and greatly reduce post-closure care and maintenance such as mowing. The cover also improves stormwater quality and nearly eliminates the need to clean channels and the stormwater basin. The cover can withstand extreme weather conditions and life expectancy beyond the post-closure care period.

## SCHEDULE

**General Contractor Construction Mobilization was anticipated to be March 1, 2020 but delayed until June 1, 2020 due to a delay in the award process.**

GSI's schedule had 177 days including setup and 44 weather days (not including Sunday's & Holidays). This affected the completion date drastically as the project was scheduled for completion on or before December 1, 2020.

GSI was able to complete the project ahead of schedule. The two biggest drivers that caused this project to do so well were production rates and favorable weather. The crew met or exceeded estimated production rates for all the materials installed; total manhours charged to the project were 2k less than the estimated total hours. Total estimated hours lost to bad weather was 6.2k while the actual hours lost came in at 1.3k (21%). These both translated to fewer hotel days and equipment charges.