



## Groundwater Remedy Selection and Design Semi-Annual Report

December 12, 2019

Pursuant to 40 Code of Federal Regulations (CFR) Section (§) 257.97(a) of the Coal Combustion Residuals (CCR) Rule, Lakeland Electric is required to prepare a semi-annual report describing progress in selecting a remedy for the CCR unit that has been identified as potentially impacting groundwater based on a statistical assessment of groundwater data collected at the C.D. McIntosh Power Plant (Site) located in Lakeland, Florida. This document serves as the first semi-annual report prepared after initiating corrective measures at McIntosh Power Plant.

### 1. Summary of Activities Completed to Date

Golder and Associates (Golder) finalized a report presenting an *Assessment of Corrective Measures Byproduct Storage Area C.D. McIntosh Power Plant* on June 12, 2019. The assessment documents the development and evaluation of various corrective measures for the CCR unit including:

- Source control
- Monitored natural attenuation
- Enhanced monitored natural attenuation
- Groundwater pump and treat
- Installation of a hydraulic barrier
- Installation of a permeable reactive barrier
- Utilizing phytoremediation

Lakeland Electric has engaged an additional consultant, Geosyntec Consultants, Inc. (Geosyntec), to evaluate the CCR rule activities to date and to help evaluate potential next steps. This evaluation began October 2, 2019 and a finalized report is expected by December 31, 2019.

Golder has submitted a proposal for additional site characterization. This proposal will be evaluated and fine-tuned after receipt of the Geosyntec CCR program evaluation report.

## 2. Future Planned Activities

As identified in the *Assessment of Corrective Measures Byproduct Storage Area C.D. McIntosh Power Plant*, additional site characterization is necessary prior to selection and design of the remedies. Currently, expected planned activities may include:

- Identification and evaluation of appropriate source control measures relative to planned future operations of the Byproduct Storage Area
- Additional site characterization to evaluate feasibility of corrective measures including monitored natural attenuation (MNA) and/or Enhanced MNA
- Groundwater modeling to evaluate and design specific corrective measures
- Bench-scale or on-site pilot-testing may be necessary to further evaluate the effectiveness of certain corrective measures
- Constructability evaluation (site limitations as such as working space, above or below grade utilities / railroad tracks, implementation challenges due to site conditions to achieve design objectives, safety of workers, and cost of construction)

The next semi-annual report documenting progress in remedy selection at the Site will be prepared no later than June 12, 2020.