



## Statistical Methods Certification

### Limestone Electric Generating Station Jewett, Texas

August 2018

*Prepared For*  
*NRG Texas Power, LLC*

A handwritten signature in blue ink, appearing to read "R. Kent Nilsson", written over a horizontal line.

R. Kent Nilsson, P.E.  
Senior Engineer

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Tony Dworaczyk, P.G.  
Senior Project Manager

*TRC Environmental Corporation | NRG Texas Power, LLC*  
*Statistical Methods Certification*  
*Limestone Electric Generating Station, Jewett, Texas*

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# Section 1

## Regulatory Requirement

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The Environmental Protection Agency's (EPA) "Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule" (40 CFR Part 257 and Part 261) requires pursuant to 40 CFR 257.93(f), the owner or operator of an existing CCR unit must select one of the statistical methods specified in 40 CFR 257.93(f)(1) through 40 CFR 257.93(f)(5) to evaluate groundwater monitoring data for each specified constituent. 40 CFR 257.93(f)(6) requires the owner or operator to obtain a certification from a qualified professional engineer stating the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR management area.

# Section 2

## Statistical Method Narrative Update

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Pursuant to 40 CFR 257.93(f)(6), a qualified professional engineer prepared the initial certification for the statistical method selected to evaluate the groundwater quality data for the CCR management area at the Limestone Electric Generating Station on October 17, 2017. The initial certification was prepared by Environmental Resources Management (ERM) on behalf of NRG Texas Power, LLC on behalf of NRG Texas Power, LLC and stated that the selected statistical method was appropriate for evaluating the groundwater monitoring data for the CCR management area.

Since preparation of the October 17, 2017 statistical methods certification, statistical analysis for the eight background/baseline and the first post-background/baseline detection groundwater monitoring events using the initial certified statistical methods using a Prediction Limit (PL) approach has been performed on behalf of NRG Texas Power, LLC. The results of the statistical investigations were provided in the *Groundwater Monitoring Reports* (ERM, February 28, 2018) for the Secondary E Pond (SWMU 003), Landfill (SWMU 004), E Pond (SWMU 019), ST-18 Pond, and K Pond (BACP). Since preparation of the October 17, 2017 certification, NRG Texas Power, LLC has subsequently reviewed its selection of statistical methods for the CCR management area at the Limestone Electric Generating Station under 40 CFR 257. Based on its review, NRG Texas Power, LLC has revised its selection of statistical methods and will use a Tolerance Limit (TL) approach, which is another statistical method permitted under 257.93(f)(5), to evaluate the groundwater monitoring data under 257.93 collected from the CCR management area at the Limestone Electric Generating Station. Furthermore, pooling of upgradient monitoring well data will be conducted, which will allow for a more accurate representation of groundwater quality and identification of the full range of groundwater quality upgradient of the Landfill and Secondary E Pond at the Limestone Electric Generating Station.

Therefore, the purpose of this revised certification is to update the original October 17, 2017 statistical methods certification by selecting the Tolerance Limit (TL) statistical method, instead of the Predictive Limit (PL) statistical method that was certified in the October 17, 2017 statistical methods certification, for the CCR management area at the Limestone Electric Generating Station under 40 CFR 257. Furthermore, the purpose of this revised certification is to incorporate pooling of the upgradient monitoring well data into the statistical analysis of the Landfill and Secondary E Pond upgradient, background monitoring well data.

# Section 3 Certification

I, the undersigned Texas Professional Engineer, hereby certify that I am familiar with the technical requirements of 40 CFR 257.93. I also certify that it is my professional opinion that, to the best of my knowledge, information, and belief, the revised statistical methods described herein are appropriate for evaluating the ground water monitoring data for the CCR management area and are in accordance with current good and accepted engineering practice(s) and standard(s) appropriate to the nature of the project and the technical requirements of 40 CFR 257.93.

For the purpose of this document, "certify" and "certification" shall be interpreted and construed to be a "statement of professional opinion". The certification is understood and intended to be an expression of my professional opinion as a Texas Licensed Professional Engineer, based upon knowledge, information, and belief. The statement(s) of professional opinion are not and shall not be interpreted or construed to be a guarantee or a warranty of the monitoring system.

R. Kent Nilsson

107021

Printed Name of Professional Engineer

State of Texas License Number



August 13, 2018

Signature of Professional Engineer

Date

