Tennessee Valley Authority, Post Office Box 2000, Soddy Daisy, Tennessee 37384-2000

August 19, 2013

Ms. Jennifer Innes
Tennessee Department of Environment
and Conservation
Chattanooga Environmental Field Office
Division of Water Pollution Control
State Office Building, Suite 550
540 McCallie Avenue
Chattanooga, Tennessee 37402

Dear Ms. Innes:

TENNESSEE VALLEY AUTHORITY (TVA) - SEQUOYAH NUCLEAR PLANT (SQN) - NPDES PERMIT NO. TN0026450 - AGREED ORDER - CASE 89-3036 PROCEDURE REVISION

Please find enclosed the revised operating procedure for the SQN Intake Forebay Fish Refuge. The operating procedure is maintained in response to Agreed Order Case 89-3036.

The previous revision of the procedure for Agreed Case Order 89-3036 (01/26/1996) was based on dissolved oxygen (DO) concentrations in the Watts Bar Hydro (WBH) tailrace and daily modeling of DO concentration in the reservoir. TVA has been providing oxygenation of releases from Watts Bar Dam which has lead to bias in WBH tailrace DO monitoring and daily modeling.

TVA is proposing that SQN Intake Forebay DO monitoring be implemented seasonally from May 1 to September 30. DO sampling will take place at the SQN Intake Skimmer wall and aeration of the Intake Forebay will be initiated when concentrations decrease below 2.5 mg/L. TVA has requested that the conditions agreed upon in case 89-3036 are added as an operating condition in the new NPDES permit. If you have any questions or need additional information, please contact Brad Love by email at bmlove@tva.gov or by phone at (423) 843-6714.

Sincerely,

John T. Carlin
Site Vice President
Sequoyah Nuclear Plant

Enclosure

cc (Enclosure):
Mr. Vojin Janjić
Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 12th Floor
Nashville, Tennessee 37243

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

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Enclosure

Sequoyah Nuclear Plant

Dissolved Oxygen Monitoring and Operating Procedure for Intake Forebay Fish Refuge

From May 1 to September 30 dissolved oxygen sampling of the SQN Intake Forebay will be conducted to monitor for low dissolved oxygen (DO) conditions which could contribute to a fish kill.

DO measurements will be collected at the skimmer wall approximately 14 meters below the top of the wall. This depth corresponds to approximately the center of the submerged opening beneath the skimmer wall. TVA will also perform visual inspections of the SQN intake forebay for signs of fish distress at the water surface.

TVA will begin to sample the SQN Intake Forebay at least once per week after May 1. If the DO decreases below 4.0 mg/L, TVA will increase DO sampling to a minimum of three times per week until the aeration system is placed in service.

The aeration system will be placed in service when the DO drops below 2.5 mg/L.

While aeration is in service, DO sampling frequency will be reduced to a minimum of once per week. The aeration system will be removed from service if the DO increases to 4.0 mg/L or higher. If the aeration system is removed from service, DO sampling will resume at a minimum of three times per week to ensure conditions remain stable.

If sampling demonstrates DO conditions remain stable or increasing above 4.0 mg/L, sampling frequency will be reduced to a minimum of once per week. If the sampled DO again drops below 4.0 mg/L, TVA will resume sampling at a minimum of three times per week, until the aeration system is again placed in service or the DO conditions again become stable or increasing above 4.0 mg/L.

DO sampling will be suspended after September 30 if the measured DO remains stable above 4.0 mg/L.

If a fish kill is observed in the SQN Intake Forebay which is attributed to low DO conditions, TVA will notify the appropriate agencies in accordance with TVA's standard operating procedure for incident reporting.