

December 21, 2016

Mr. Brian Hocutt  
Cooperative Energy  
P.O. Box 15849  
Hattiesburg, MS 39402

Re: CCR Seismic Impact Zone Certification  
R.D. Morrow, Sr. Generating Station  
Purvis, Lamar County, Mississippi

Dear Mr. Hocutt:

Cooperative Energy (formerly South Mississippi Electric Power Association) retained Environmental Management Services, Inc. (EMS) to evaluate Cooperative Energy's compliance with the Federal Coal Combustion Residuals Rule (CCR Rule) requirements in accordance with 40 CFR 257.63 which states:

*“(a) New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located in seismic impact zones unless the owner or operator demonstrates by the dates specified in paragraph (c) of this section that all structural components including liners, leachate collection and removal systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.”*

Cooperative Energy has two existing CCR surface impoundments including: 1) the Emergency Scrubber Surge Pond, and 2) the Scrubber Supply Pond. Cooperative Energy has an existing CCR landfill, but does not have a “new CCR landfill”, nor does it currently have a lateral expansion of any CCR unit. Therefore, at this time, only the two existing CCR surface impoundments are subject to 40 CFR 257.63.

A *Seismic impact zone* is defined as an area having 2% or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10 g in 50 years. The attached 2% probability seismic hazard map created on the USGS website, *Seismic Hazard Analysis Tools, Custom Hazard Maps* (<http://earthquake.usgs.gov/hazards/apps/>) indicates between 4%g (0.04 g) and 6%g (0.06 g) for the facility, which is below the regulation specified 0.10 g. Therefore we conclude that the site is not located in a seismic impact zone.

**Engineer's Certification**

I hereby certify, as a Professional Engineer in the State of Mississippi, that the information in this document was assembled under my direct personal charge and that this determination was conducted in accordance with and meets the requirements of 40 CFR Part 257.63(a).


  
Christopher Taylor Johnson, P.E.  
Mississippi Professional Engineer No. 15761

Date: 12/21/2016



**Geologist's Certification**

I have reviewed the portions of this report having to do with geology in sufficient depth to accept full responsibility for those contents.

  
Kenneth D. Ruckstuhl, RPG  
MS Professional Geologist No. 0090

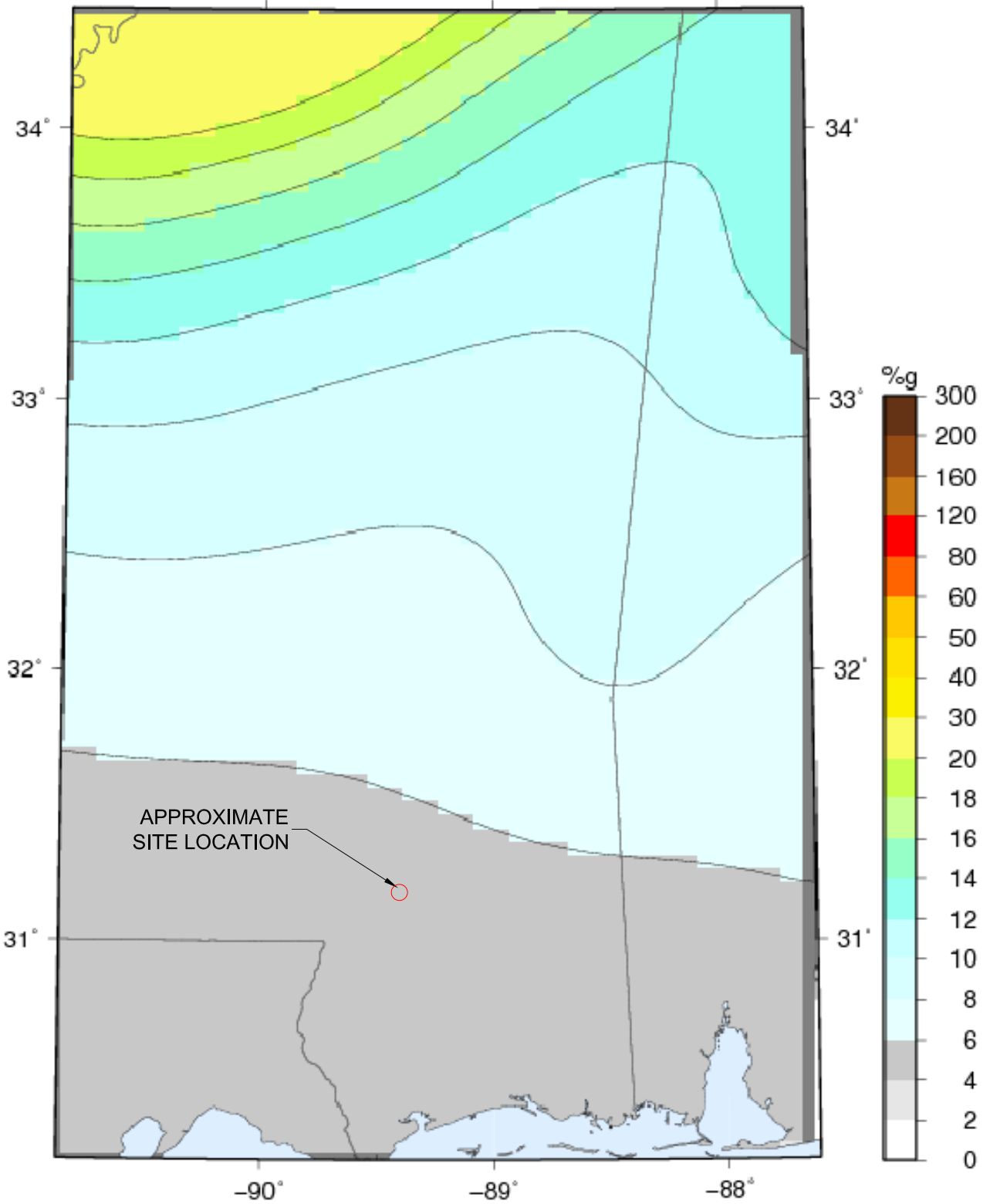
Date: 12/21/2016



Attachment – Seismic Hazard Map

*File: Seismic Impact Zones*

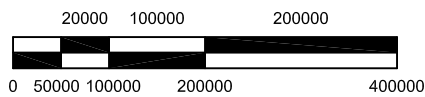
Attachment



APPROXIMATE  
SITE LOCATION



MAP CREATED USING USGS  
CUSTOM HAZARD MAPS, SEISMIC  
HAZARD ANALYSIS TOOLS  
<http://earthquake.usgs.gov/hazards/apps/>



### SEISMIC HAZARD MAP

SEISMIC IMPACT AREA EVALUATION

COOPERATIVE ENERGY  
R. D. MORROW, SR. GENERATING STATION  
PURVIS, MS

DATE:	12-15-2016	APPROVED:	K. RUCKSTUHL	DRAWN BY:	CTJ
SCALE:	AS SHOWN	DATE:	12/15/2016	CAD NO.	SOU2-16-002

**ENVIRONMENTAL**  
MANAGEMENT SERVICES, INC.

FIGURE

1