

July 6, 2007

APPLICANT: Entergy Nuclear

PROJECT: Project No. 745

SUBJECT: SUMMARY OF RIVER BEND SITE VISIT ON MARCH 28, 2007 REGARDING
COMBINED LICENSE PRE-APPLICATION SUBSURFACE INVESTIGATION
ACTIVITIES

On March 28, 2007, the U.S. Nuclear Regulatory Commission (NRC) conducted a visit at the River Bend site. The NRC staff from the headquarters Office of New Reactors (NRO) and Region II office conducted the visit to observe subsurface investigation activities being conducted by Entergy Nuclear (Entergy) to obtain geotechnical and seismic data in support of the anticipated combined license (COL) application for a new nuclear power plant. The staff's observations and acquired information are intended to support NRC's future review of a COL application for the River Bend site.

A list of NRC participants and persons with whom discussions were held is provided at the end of this summary. The Region II site visit summary and the presentation materials distributed during the visit are available through the Agencywide Documents Access and Management System (ADAMS) at accession numbers ML071070422 and ML071830357. ADAMS is the system that provides text and image files of NRC's public documents. If you do not have access to ADAMS or have problems accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) staff at 1-800-397-4209, 301-415-4737 or pdr@nrc.gov.

Background

Entergy informed the NRC by letter dated July 17, 2006, of the intent to submit a COL application in May 2008 for a new nuclear power facility at the River Bend site. Entergy has contracted Black and Veatch as a nuclear services provider, with Professional Service Industries, Inc (PSI), to conduct the geotechnical site studies required for the COL application.

Visit Highlights

On March 28, 2007, the NRC staff held an entrance meeting with representatives from Entergy and its contractors to become familiar with the River Bend subsurface investigation program, acquire the current status, and plan visit activities. Entergy representatives presented an overview of the program. Field exploration methods include standard penetration tests, ground water observation wells, seismic downhole velocity measurements (P-S logging), cone penetration tests, and borehole pressuremeter tests. Proposed geotechnical laboratory tests on soil samples include soil classification, moisture content, direct shear tests, triaxial shear tests, consolidation tests and dynamic tests.

Staff visit activities included: review of the boring hole plan and inspection of several borehole locations; inspection of selected core boring soil samples; review of selected field logs, boring assignment records, work instructions, drilling and sampling procedures, and sampling control

procedures; interview of a rig geologists responsible for providing technical oversight of drilling operations; review of selected personnel qualification and training records; and discussions with a number of Entergy/contractor personnel. Drilling and sampling observations were not conducted due to schedule and technical difficulties experienced by the contractor drill rigs. The staff noted that 29 new boreholes were completed but not all testing had been completed. In addition, two seismic holes, to be bored to a depth of 550 feet, had not been completed due to technical problems with the drill rigs. The staff conducted an exit meeting at the end of the business day.

In discussions with Entergy, the staff noted recent updates to applicable regulatory guides and the standard review plan and addressed the issue of minimum shear wave velocity. The staff expressed an overall favorable response to Entergy's subsurface investigation program and found the site visit to be beneficial in that the observations and acquired information will assist the anticipated review of the River Bend COL application.

NRC Staff

R. Carrion, RII
T. Cheng, NRR
A. Johnson, NRO
T. Kevern, NRO
Y. Li, NRR
S. Parra, RII

Applicant Personnel

R. Biggs, Entergy
A. Blanco, Black and Veatch
J. Caldwell, Black & Veatch
L. Drbal, Black & Veatch
K. Hanson, Geomatrix Consultants
A. Layfield, Black & Veatch
G. Madden, Black & Veatch
M. Petersen, Black & Veatch
J. Roberts, Entergy
G. Young, Entergy
G. Zinke, Entergy

Please direct any inquiries concerning this meeting to me at 301-415-0224 or tak@nrc.gov.

/RA/

Thomas A. Kevern, Senior Project Manager
ESBWR/ABWR Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

cc: See next page

procedures; interview of a rig geologists responsible for providing technical oversight of drilling operations; review of selected personnel qualification and training records; and discussions with a number of Entergy/contractor personnel. Drilling and sampling observations were not conducted due to schedule and technical difficulties experienced by the contractor drill rigs. The staff noted that 29 new boreholes were completed but not all testing had been completed. In addition, two seismic holes, to be bored to a depth of 550 feet, had not been completed due to technical problems with the drill rigs. The staff conducted an exit meeting at the end of the business day.

In discussions with Entergy, the staff noted recent updates to applicable regulatory guides and the standard review plan and addressed the issue of minimum shear wave velocity. The staff expressed an overall favorable response to Entergy's subsurface investigation program and found the site visit to be beneficial in that the observations and acquired information will assist the anticipated review of the River Bend COL application.

NRC Staff

R. Carrion, RII
T. Cheng, NRR
A. Johnson, NRO
T. Kevern, NRO
Y. Li, NRR
S. Parra, RII

Applicant Personnel

R. Biggs, Entergy
A. Blanco, Black and Veatch
J. Caldwell, Black & Veatch
L. Drbal, Black & Veatch
K. Hanson, Geomatrix Consultants
A. Layfield, Black & Veatch
G. Madden, Black & Veatch
M. Petersen, Black & Veatch
J. Roberts, Entergy
G. Young, Entergy
G. Zinke, Entergy

Please direct any inquiries concerning this meeting to me at 301-415-0224 or tak@nrc.gov.

/RA/

Thomas A. Kevern, Senior Project Manager
ESBWR/ABWR Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

cc: See next page

DISTRIBUTION See next page
ADAMS Accession No. ML071830379

OFFICE	PM: NGE1	BC: NGE1
NAME	TKevern	M Shuaibi
DATE	07/03/2007	07/06/2007

OFFICIAL RECORD COPY

Distribution for River Bend Site Visit Summary on 03/28/2007 dated July 6, 2007

Hard Copy

NGE1 R/F

TKevern

E-mail

NGE1 Group

RidsOpaMail

RidsAcrcAcnwMailCenter

RidsOgcMailCenter

KWinsburg

JJolicouer

MGavrillas

PCochran

T Cheng

R Karas

Y Li

A Johnson

R Carrion, RII

M Lesser, DCI

cc:

Mr. Earl J. Barbry Jr.
State Historic Preservation Officer
Turnika Biloxi Indian Tribe of Louisiana
P.O. Box 1589
Marksville, LA 71351

Ms. Kathleen B. Blanco
Office of Governor
PO Box 94004
State of Louisiana
Baton Rouge, LA 70804-9004

Ms. Michele Boyd
Legislative Director
Energy Program
Public Citizens Critical Mass Energy
and Environmental Program
215 Pennsylvania Avenue, SE
Washington, DC 20003

Mr. Marvin Fertel
Senior Vice President
and Chief Nuclear Officer
Nuclear Energy Institute
1776 I Street, NW
Suite 400
Washington, DC 20006-3708

Ms. Marilyn Kray
President
NuStart Energy Development, LLC
200 Exelon Way, KSA3-N
Kennett Square, PA 19348

Email

APH@NEI.org (Adrian Heymer)
awc@nei.org (Anne W. Cottingham)
bob.brown@ge.com (Robert E. Brown)
BrinkmCB@westinghouse.com (Charles Brinkman)
chris.maslak@ge.com (Chris Maslak)
cwaltman@roe.com (C. Waltman)
david.lewis@pillsburylaw.com (David Lewis)
dlochbaum@UCSUSA.org (David Lochbaum)
dlorfin@entergy.com (David Lorfing)
DrbalLF@bv.com (Larry Drbal)
fburfor@entergy.com (Jerry Burford)
frankq@hursttech.com (Frank Quinn)
george.stramback@gene.ge.com (George Stramback)
greshaja@westinghouse.com (James Gresham)
grolfso@entergy.com (Greg Rolfson)
gsparks@entergy.com (Greg Sparks)
gyoung4@entergy.com (Garry Young)
gzinke@entergy.com (George Alan Zinke)
jgutierrez@morganlewis.com (Jay M. Gutierrez)
jim.kinsey@ge.com (James Kinsey)
jim.riccio@wdc.greenpeace.org (James Riccio)
JJNesrsta@cpsenergy.com (James J. Nesrsta)
john.o'neil@pillsburylaw.com (John O'Neil)
Joseph.savage@ge.com (Joseph Savage)
Joseph_Hegner@dom.com (Joseph Hegner)
jrober3@entergy.com (Jerry Roberts)
jvenabl@entergy.co (Joe Venable)
KSutton@morganlewis.com (Kathryn M. Sutton)
kwaugh@impact-net.org (Kenneth O. Waugh)
lynchs@gao.gov (Sarah Lynch - Meeting Notices Only)
MaddenG@BV.com (George Madden)
maria.webb@pillsburylaw.com (Maria Webb)
mark.beaumont@wsms.com (Mark Beaumont)
matias.travieso-diaz@pillsburylaw.com (Matias Travieso-Diaz)
mbourge@entergy.com (Mike Bourgeois)
media@nei.org (Scott Peterson)
mgiles@entergy.com (M. Giles)
mike_moran@fpl.com (Mike Moran)
mwl@nei.org (Melanie Lyons)
patriciaL.campbell@ge.com (Patricia L. Campbell)
paul.gaukler@pillsburylaw.com (Paul Gaukler)
PGunter@NIRS.org (Paul Gunter)
phinnen@entergy.com (Paul Hinnenkamp)
pshastings@duke-energy.com (Peter Hastings)
RJB@NEI.org (Russell Bell)
RKTemple@cpsenergy.com (R.K. Temple)
roberta.swain@ge.com (Roberta Swain)
ronald.hagen@eia.doe.gov (Ronald Hagen)

sandra.sloan@areva.com (Sandra Sloan)
SauerB@BV.com (Robert Sauer)
sfrantz@morganlewis.com (Stephen P. Frantz)
tburke@entergy.com (Terry Burke)
tom.miller@nuclear.energy.gov (Thomas P. Miller)
twilli2@entergy.com (Tom Williamson)
waraksre@westinghouse.com (Rosemarie E. Waraks)
wayne.marquino@ge.com (Wayne Marquino)
whughey@entergy.com (Kenneth Hughey)