



SEP 02 2010
L-2010-136
10 CFR 50.90

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555-0001

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Revised Meteorological Data for 2005-2009 with ΔT Bias Supporting
Alternative Source Term and Conforming License Amendment Request 196

References:

- (1) W. Jefferson (FPL) to U.S. Nuclear Regulatory Commission (L-2009-133), "License Amendment Request 196: Alternative Source Term and Conforming Amendment," Accession No. ML092050277, June 25, 2009.
- (2) W. Jefferson (FPL) to U.S. Nuclear Regulatory Commission (L-2009-163), "Transmittal of Meteorological Data CD Supporting Alternative Source Term and Conforming License Amendment Request 196 – Supplemental Information," Accession No. ML100680718, July 21, 2009.
- (3) J. Paige (NRC) to M. Nazar (FPL), "Turkey Point Units 3 and 4 – Request for Additional Information Regarding Request to Adopt the Alternate Source Term (TAC Nos. ME1624 and ME1625)," Accession No. ML100700446, March 24, 2010.
- (4) Email from J. Paige (NRC) to S. Franzone (FPL), Follow-up Requests for Additional Information RE Turkey Point, Unit 3 and 4 AST LAR, Accession No. ML101480750, May 28, 2010.
- (5) M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-121), "Revised Meteorological Data for 2005-2009 Supporting Alternative Source Term and Conforming License Amendment Request 196," Accession No. ML101650648, June 11, 2010.
- (6) M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-131), "Response to 5/28/2010 Request for Additional Information (RAI) Regarding Alternative Source Term (AST) License Amendment Request (LAR) 196 (TAC Nos. ME1624 and ME1625)," Accession No. ML101760019, June 23, 2010.
- (7) M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-137), "Revised Radiological Dose Consequences for Alternative Source Term and Conforming License Amendment Request 196," Accession No. ML101800222, June 25, 2010.

By letter L-2009-133 dated June 25, 2009 [Reference 1], Florida Power and Light (FPL) requested to amend Facility Operating Licenses DPR-31 and DPR-41 and revise the Turkey Point Units 3 and 4 Technical Specifications (TS). The proposed amendments revise the TS to adopt the Alternative Source Term (AST) as allowed in 10 CFR 50.67.

The meteorological data for 2003-2007 originally used to support the AST License Amendment Request (LAR) was transmitted to the NRC staff by letter dated July 21, 2009 [Reference 2]. Subsequent NRC review of this meteorological data resulted in questions regarding the quality of the data as submitted for this period [References 3, 4]. Based on further evaluation of this data, FPL decided to revise the meteorological data set to include more recent meteorological data from years 2008-2009 that was not previously available. On June 11, 2010, FPL submitted revised meteorological data for years 2005-2009 [Reference 5]. Resolution of the quality issues raised regarding the calibration of the meteorological tower temperature sensors has resulted in a conservative decision to bias vertical temperature differentials (ΔT) with the average (mean) calculated value for each channel over each calibration interval for the hourly meteorological data. On June 23, 2010, FPL provided its RAI response by letter L-2010-131 in which the basis for using the temperature biased meteorological data was discussed in detail [Reference 6].

Enclosed is a compact disc (CD) titled "Turkey Point AST LAR 196, Temperature Biased Meteorological Data, FPL Letter L-2010-136," that includes Turkey Point Units 3 and 4 ΔT biased meteorological data encompassing the five year period from January 2005 through December 2009. The data is provided in two different formatted ASCII files. The Format 1 files (.met) contain the hourly meteorological data after quality verification and reformatting of the data for input to ARCON96. The Format 2 files contain the hourly meteorological data formatted in accordance with Appendix A to RG 1.23, Rev 1 and NUREG-0917. In this second format the applicable stability class (1 - 7) has been added to the last (unused) field in the data file to facilitate NRC's review of the data. The stability class is derived from the indicated ΔT between the 10M and 60M elevations, with a preference towards using the Channel "A" instruments. Also provided are the ARCON96 card image input (.rsf) files and printed output (.log) files. A listing of all ARCON96 cases is in the Release/Receptor Combination Table in Attachment 2 of PTN-ENG-SENS-02-052, Rev 2 (enclosure to FPL letter L-2009-163) [Reference 2]. FPL submitted the revised AST radiological dose consequences by letter L-2010-137 on June 25, 2010 [Reference 7].

The averaged ΔT value for each channel will be applied as a bias or correction factor to the hourly meteorological data. The effects of this correction will be small shifts in the calculated stability classes for the hourly meteorological data and result in small changes to the calculated atmospheric dispersion factors (X/Qs). When the resultant ΔT biased X/Q values exceed the unbiased X/Qs, the more conservative value will be used. This technical approach will assure conservative radiological dose consequences for the AST analyzed design basis accidents.

The attachment to this letter provides the list of the files contained on the enclosed CD.

In accordance with 10 CFR 50.91(b)(1), a copy of this letter is being forwarded to the State Designee of Florida.

This submittal does not alter the significant hazards consideration or the environmental assessment previously submitted by FPL letter L-2009-133 [Reference 1].

This letter contains no new commitments and no revisions to existing commitments.

Should you have any questions regarding this submittal, please contact Mr. Robert J. Tomonto, Licensing Manager, at (305) 246-7327.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on September 2nd, 2010.

Very truly yours,

PAUL U. RUBIN


Michael Kiley *for:*
Site Vice President

Turkey Point Nuclear Plant

Attachment

cc: USNRC Regional Administrator, Region II
USNRC Project Manager, Turkey Point Nuclear Plant
USNRC Resident Inspector, Turkey Point Nuclear Plant
Mr. W. A. Passetti, Florida Department of Health (w/o CD)

Turkey Point Meteorological Data CD File List

File Name	File Size	File Type
MET DATA – ARCON96 DATA*		
2005		
TP05-NAIQA_Variable-Bias.met	317 KB	MET FILE
2006		
TP06-NAIQA_Variable-Bias.met	317 KB	MET FILE
2007		
TP07-NAIQA_Variable-Bias.met	317 KB	MET FILE
2008		
TP08-NAIQA_Variable-Bias.met	318 KB	MET FILE
2009		
TP09-NAIQA_Variable-Bias.met	317 KB	MET FILE
MET DATA – NRC TAPE DATA**		
2005-2009		
TPALL-NAIQA-Converted Biased.NRC	6,934 KB	NRC FILE

*ARCON96 Formatted Wind Speeds in miles per hour

**NRC Tape Formatted in meters per second

Turkey Point Meteorological Data CD File List

File Name	File Size	File Type
MET DATA – ARCON96 CARD IMAGE INPUTS		
TP01bias.rsfs	1KB	RSF FILE
TP02bias.rsfs	1KB	RSF FILE
TP03bias.rsfs	1KB	RSF FILE
TP04bias.rsfs	1KB	RSF FILE
TP05bias.rsfs	1KB	RSF FILE
TP06bias.rsfs	1KB	RSF FILE
TP07bias.rsfs	1KB	RSF FILE
TP08bias.rsfs	1KB	RSF FILE
TP09bias.rsfs	1KB	RSF FILE
TP10bias.rsfs	1KB	RSF FILE
TP11bias.rsfs	1KB	RSF FILE
TP12bias.rsfs	1KB	RSF FILE
TP13bias.rsfs	1KB	RSF FILE
TP14bias.rsfs	1KB	RSF FILE
TP15bias.rsfs	1KB	RSF FILE
TP16bias.rsfs	1KB	RSF FILE
TP17bias.rsfs	1KB	RSF FILE
TP18bias.rsfs	1KB	RSF FILE
TP19bias.rsfs	1KB	RSF FILE
TP20bias.rsfs	1KB	RSF FILE
TP21bias.rsfs	1KB	RSF FILE
TP22bias.rsfs	1KB	RSF FILE
TP23bias.rsfs	1KB	RSF FILE
TP24bias.rsfs	1KB	RSF FILE
TP25bias.rsfs	1KB	RSF FILE
TP26bias.rsfs	1KB	RSF FILE
TP27bias.rsfs	1KB	RSF FILE
TP28bias.rsfs	1KB	RSF FILE
TP29bias.rsfs	1KB	RSF FILE
TP30bias.rsfs	1KB	RSF FILE
TP31bias.rsfs	1KB	RSF FILE
TP32bias.rsfs	1KB	RSF FILE
TP33bias.rsfs	1KB	RSF FILE
TP34bias.rsfs	1KB	RSF FILE
TP35bias.rsfs	1KB	RSF FILE
TP36bias.rsfs	1KB	RSF FILE
TP37bias.rsfs	1KB	RSF FILE
TP38bias.rsfs	1KB	RSF FILE
TP39bias.rsfs	1KB	RSF FILE
TP40bias.rsfs	1KB	RSF FILE
TP41bias.rsfs	1KB	RSF FILE
TP42bias.rsfs	1KB	RSF FILE

File Name	File Size	File Type
TP43bias.rsf	1KB	RSF FILE
TP44bias.rsf	1KB	RSF FILE
TP45bias.rsf	1KB	RSF FILE
TP46bias.rsf	1KB	RSF FILE
TP47bias.rsf	1KB	RSF FILE
TP48bias.rsf	1KB	RSF FILE
TP49bias.rsf	1KB	RSF FILE
TP50bias.rsf	1KB	RSF FILE
TP51bias.rsf	1KB	RSF FILE
TP52bias.rsf	1KB	RSF FILE
TP53bias.rsf	1KB	RSF FILE
TP54bias.rsf	1KB	RSF FILE
TP55bias.rsf	1KB	RSF FILE
TP56bias.rsf	1KB	RSF FILE
TP57bias.rsf	1KB	RSF FILE
TP58bias.rsf	1KB	RSF FILE
TP59bias.rsf	1KB	RSF FILE
TP60bias.rsf	1KB	RSF FILE
TP61bias.rsf	1KB	RSF FILE
TP62bias.rsf	1KB	RSF FILE
TP63bias.rsf	1KB	RSF FILE
TP64bias.rsf	1KB	RSF FILE
TP65bias.rsf	1KB	RSF FILE
TP66bias.rsf	1KB	RSF FILE
TP67bias.rsf	1KB	RSF FILE
TP68bias.rsf	1KB	RSF FILE
TP69bias.rsf	1KB	RSF FILE
TP70bias.rsf - Deleted	0	
TP71bias.rsf - Deleted	0	
TP72bias.rsf - Deleted	0	
TP73bias.rsf - Deleted	0	
TP74bias.rsf - Deleted	0	
TP75bias.rsf - Deleted	0	
TP76bias.rsf	1KB	RSF FILE
TP77bias.rsf	1KB	RSF FILE
TP78bias.rsf	1KB	RSF FILE
TP79bias.rsf	1KB	RSF FILE
TP80bias.rsf	1KB	RSF FILE
TP81bias.rsf	1KB	RSF FILE
TP82bias.rsf	1KB	RSF FILE
TP83bias.rsf	1KB	RSF FILE
TP84bias.rsf	1KB	RSF FILE
TP85bias.rsf	1KB	RSF FILE
TP86bias.rsf	1KB	RSF FILE

File Name	File Size	File Type
TP87bias.rsf	1KB	RSF FILE
TP88bias.rsf	1KB	RSF FILE
TP89bias.rsf	1KB	RSF FILE
TP90bias.rsf	1KB	RSF FILE
TP91bias.rsf	1KB	RSF FILE
TP92bias.rsf	1KB	RSF FILE
TP93bias.rsf	1KB	RSF FILE
TP94bias.rsf	1KB	RSF FILE
TP95bias.rsf	1KB	RSF FILE
TP96bias.rsf	1KB	RSF FILE
TP97bias.rsf	1KB	RSF FILE
TP98bias.rsf	1KB	RSF FILE
TP99bias.rsf	1KB	RSF FILE
TP100bia.rsf	1KB	RSF FILE
TP101bia.rsf	1KB	RSF FILE
TP102bia.rsf	1KB	RSF FILE
TP103bia.rsf	1KB	RSF FILE
TP104bia.rsf	1KB	RSF FILE
TP105bia.rsf	1KB	RSF FILE
MET DATA – ARCON96 PRINTED OUTPUTS		
TP01bias.log	5 KB	TEXT FILE
TP02bias.log	5 KB	TEXT FILE
TP03bias.log	5 KB	TEXT FILE
TP04bias.log	5 KB	TEXT FILE
TP05bias.log	5 KB	TEXT FILE
TP06bias.log	5 KB	TEXT FILE
TP07bias.log	5 KB	TEXT FILE
TP08bias.log	5 KB	TEXT FILE
TP09bias.log	5 KB	TEXT FILE
TP10bias.log	5 KB	TEXT FILE
TP11bias.log	5 KB	TEXT FILE
TP12bias.log	5 KB	TEXT FILE
TP13bias.log	5 KB	TEXT FILE
TP14bias.log	5 KB	TEXT FILE
TP15bias.log	5 KB	TEXT FILE
TP16bias.log	5 KB	TEXT FILE
TP17bias.log	5 KB	TEXT FILE
TP18bias.log	5 KB	TEXT FILE
TP19bias.log	5 KB	TEXT FILE
TP20bias.log	5 KB	TEXT FILE
TP21bias.log	5 KB	TEXT FILE
TP22bias.log	5 KB	TEXT FILE
TP23bias.log	5 KB	TEXT FILE

File Name	File Size	File Type
TP24bias.log	5 KB	TEXT FILE
TP25bias.log	5 KB	TEXT FILE
TP26bias.log	5 KB	TEXT FILE
TP27bias.log	5 KB	TEXT FILE
TP28bias.log	5 KB	TEXT FILE
TP29bias.log	5 KB	TEXT FILE
TP30bias.log	5 KB	TEXT FILE
TP31bias.log	5 KB	TEXT FILE
TP32bias.log	5 KB	TEXT FILE
TP33bias.log	5 KB	TEXT FILE
TP34bias.log	5 KB	TEXT FILE
TP35bias.log	5 KB	TEXT FILE
TP36bias.log	5 KB	TEXT FILE
TP37bias.log	5 KB	TEXT FILE
TP38bias.log	5 KB	TEXT FILE
TP39bias.log	5 KB	TEXT FILE
TP40bias.log	5 KB	TEXT FILE
TP41bias.log	5 KB	TEXT FILE
TP42bias.log	5 KB	TEXT FILE
TP43bias.log	5 KB	TEXT FILE
TP44bias.log	5 KB	TEXT FILE
TP45bias.log	5 KB	TEXT FILE
TP46bias.log	5 KB	TEXT FILE
TP47bias.log	5 KB	TEXT FILE
TP48bias.log	5 KB	TEXT FILE
TP49bias.log	5 KB	TEXT FILE
TP50bias.log	5 KB	TEXT FILE
TP51bias.log	5 KB	TEXT FILE
TP52bias.log	5 KB	TEXT FILE
TP53bias.log	5 KB	TEXT FILE
TP54bias.log	5 KB	TEXT FILE
TP55bias.log	5 KB	TEXT FILE
TP56bias.log	5 KB	TEXT FILE
TP57bias.log	5 KB	TEXT FILE
TP58bias.log	5 KB	TEXT FILE
TP59bias.log	5 KB	TEXT FILE
TP60bias.log	5 KB	TEXT FILE
TP61bias.log	5 KB	TEXT FILE
TP62bias.log	5 KB	TEXT FILE
TP63bias.log	5 KB	TEXT FILE
TP64bias.log	5 KB	TEXT FILE
TP65bias.log	5 KB	TEXT FILE
TP66bias.log	5 KB	TEXT FILE
TP67bias.log	5 KB	TEXT FILE

File Name	File Size	File Type
TP68bias.log	5 KB	TEXT FILE
TP69bias.log	5 KB	TEXT FILE
TP70bias.log - Deleted	0	
TP71bias.log - Deleted	0	
TP72bias.log - Deleted	0	
TP73bias.log - Deleted	0	
TP74bias.log - Deleted	0	
TP75bias.log - Deleted	0	
TP76bias.log	5 KB	TEXT FILE
TP77bias.log	5 KB	TEXT FILE
TP78bias.log	5 KB	TEXT FILE
TP79bias.log	5 KB	TEXT FILE
TP80bias.log	5 KB	TEXT FILE
TP81bias.log	5 KB	TEXT FILE
TP82bias.log	5 KB	TEXT FILE
TP83bias.log	5 KB	TEXT FILE
TP84bias.log	5 KB	TEXT FILE
TP85bias.log	5 KB	TEXT FILE
TP86bias.log	5 KB	TEXT FILE
TP87bias.log	5 KB	TEXT FILE
TP88bias.log	5 KB	TEXT FILE
TP89bias.log	5 KB	TEXT FILE
TP90bias.log	5 KB	TEXT FILE
TP91bias.log	5 KB	TEXT FILE
TP92bias.log	5 KB	TEXT FILE
TP93bias.log	5 KB	TEXT FILE
TP94bias.log	5 KB	TEXT FILE
TP95bias.log	5 KB	TEXT FILE
TP96bias.log	5 KB	TEXT FILE
TP97bias.log	5 KB	TEXT FILE
TP98bias.log	5 KB	TEXT FILE
TP99bias.log	5 KB	TEXT FILE
TP100bia.log	5 KB	TEXT FILE
TP101bia.log	5 KB	TEXT FILE
TP102bia.log	5 KB	TEXT FILE
TP103bia.log	5 KB	TEXT FILE
TP104bia.log	5 KB	TEXT FILE
TP105bia.log	5 KB	TEXT FILE