

November 13, 2009

Ms. Kimberly Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

Re: NERC Notice of Penalty regarding AES Ironwood, LLC FERC Docket No. NP10- -000

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty¹ regarding AES Ironwood, LLC (AES Ironwood),² NERC Registry ID# NCR00664,³ in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations and orders, as well as NERC Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).⁴

During an off-site Compliance Audit conducted April 1, 2008 through April 2, 2008 (Audit), Reliability *First* Corporation (RFC) identified possible violations of Reliability Standards FAC-008-1 Requirement (R) 1, and FAC-009-1 R1 for AES Ironwood's failure to have a valid Facilities Rating Methodology and failure to document ratings for the full scope of equipment. This Notice of Penalty is being filed with the Commission because, based on information from RFC, RFC and AES Ironwood have entered into a Settlement Agreement to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in RFC's determination and findings of the enforceable alleged violations of Reliability Standards FAC-008-1 R1, and FAC-009-1 R1. According to the Settlement Agreement, AES Ironwood neither admits nor denies the alleged violations of FAC-008-1 R1 and FAC-009-1 R1, but has agreed to the proposed penalty of five thousand dollars (\$5,000) to be assessed to AES Ironwood, in addition to other remedies and actions to mitigate the instant violations and facilitate future

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¹ Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards (Order No. 672), III FERC Stats. & Regs. ¶ 31,204 (2006); Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the North American Electric Reliability Corporation, Docket No. RM05-30-000 (February 7, 2008). See also 18 C.F.R. Part 39 (2008). Mandatory Reliability Standards for the Bulk-Power System, FERC Stats. & Regs. ¶ 31,242 (2007) (Order No. 693), reh'g denied, 120 FERC ¶ 61,053 (2007) (Order No. 693-A). See 18 C.F.R § 39.7(c)(2).

² NERC notes that, concurrently with the filing of this Notice of Penalty filing, NERC is submitting seven Notices of Penalty regarding other AES entities in the Northeast Power Coordinating Council (NPCC) and Reliability *First* Corporation (RFC) Regions.

³ Reliability *First* Corporation confirmed that AES Ironwood, LLC was included on the NERC Compliance Registry as a Generator Owner on May 30, 2007 and a Generator Operator on February 28, 2008, and, as a Generator Owner, was subject to the requirements of NERC Reliability Standards FAC-008-1 and FAC-009-1.

⁴ See 18 C.F.R § 39.7(c)(2).

compliance under the terms and conditions of the Settlement Agreement. Accordingly, the alleged violations identified as NERC Violation Tracking Identification Numbers RFC200800046 and RFC200800047 are being filed in accordance with the NERC Rules of Procedure and the CMEP.

Statement of Findings Underlying the Alleged Violations

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement executed on August 31, 2009, by and between RFC and AES Ironwood, which is included as Attachment b. The details of the findings and basis for the penalty are set forth in the Settlement Agreement and herein. This Notice of Penalty filing contains the basis for approval of the Settlement Agreement by the NERC Board of Trustees Compliance Committee (NERC BOTCC). In accordance with Section 39.7 of the Commission's regulations, 18 C.F.R. § 39.7 (2007), NERC provides the following summary table identifying each alleged violation of a Reliability Standard resolved by the Settlement Agreement, as discussed in greater detail below.

Region	Registered Entity	NOC ID	NERC Violation ID	Reliability Std.	Req. (R)	VRF	Total Penalty (\$)
RFC	AES Ironwood	NOC-264	RFC200800046	FAC-008-1	1	Lower	5,000
RFC	AES Ironwood	NOC-264	RFC200800047	FAC-009-1	1	Medium	3,000

FAC-008-1 R1

The purpose of Reliability Standard FAC-008-1 is to ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.

FAC-008-1 R1 requires a Generator Owner, such as AES Ironwood, to document its current methodology used for developing Facility Ratings (Facilities Ratings Methodology) of its solely and jointly owned Facilities. Specifically, the methodology shall include all of the following: R1.1) a statement that a Facility Rating shall equal the most limiting applicable Equipment Rating of the individual equipment that comprises that Facility; R1.2) The method by which the Rating (of major BES equipment that comprises a Facility) is determined; and R1.3) other considerations listed in the Standard. FAC-008-1 R1 has a "Lower" Violation Risk Factor (VRF).

During an off-site Compliance Audit conducted April 1, 2008 through April 2, 2008, RFC Compliance Staff discovered a possible violation of FAC-008-1 R1 because AES Ironwood Run's documentation and methodologies were deficient because they solely applied to developing ratings for its generating facility. AES Ironwood had not included transmission conductors, transformers, terminal equipment, compensation devices and relay protective devices in its documented Facilities Ratings Methodology.

During the Audit, AES Ironwood submitted the following document for evidence of compliance with FAC-008-1: *Facility Ratings Methodology for AES Ironwood Related to NERC Standard FAC-008-1* (Initial Revision, Reviewed December 2007, submitted for Compliance Audit, April 2008) as evidence of its compliance with FAC-008-1. This document defined the documentation and methodology for developing ratings solely for the generating facility as a whole and therefore only defined net capability. Accordingly, the evidence reviewed was deemed insufficient to establish compliance with NERC Reliability Standard FAC-008-1 R1, because it did not include information for all equipment required to be included in the Facility Ratings Methodology.

After reviewing the evidence, RFC Enforcement Staff concluded that there was an alleged violation of FAC-008-1 R1 and the duration of the alleged violation was from June 18, 2007, when the standard became enforceable, through March 3, 2009, when AES Ironwood completed its Mitigation Plan.

FAC-009-1 R1

The purpose of Reliability Standard FAC-009-1 is to ensure that Facility Ratings used in the reliable planning and operation of the BES are determined based on an established methodology or methodologies.

FAC-009-1 R1 requires a Generator Owner, such as AES Ironwood, to establish Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings Methodology. FAC-009-1 R1 has a "Medium" VRF.

During the off-site Audit, RFC Compliance Staff discovered a possible violation of FAC-009-1 R1 because AES Ironwood had not addressed the full scope of required equipment as required by FAC-008-1 R1, specifically transmission conductors, transformers, relay protective devices, terminal equipment, and the lack of compensation devices, and could not establish Facility Ratings for its solely and jointly owned Facilities that were consistent with the associated Facility Ratings Methodology as required by FAC-009-1 R1.

During the Audit, AES Ironwood submitted the following document for evidence of compliance with FAC-009-1: *Establish and Communicate Facilities Ratings for AES Ironwood Related to NERC Standard FAC-009-1* (no date, no revision history, submitted for Compliance Audit, April 2008). However, compliance was not supported, because the AES Ironwood Facility Rating Methodology for FAC-008-1 did not include the full scope of required equipment. The scope of equipment did not include transmission conductors, transformers, relay protective devices, terminal equipment, and series and shunt compensation.

After reviewing the evidence, RFC Enforcement Staff concluded that there was an alleged violation of FAC-009-1 R1 and the duration of the alleged violation was from June 18, 2007, when the standard became enforceable, through March 3, 2009, when AES Ironwood completed its Mitigation Plan.

According to the Settlement Agreement, RFC determined a penalty of \$5,000 was appropriate for the referenced alleged violations. In reaching this determination, RFC considered the

following factors: (1) these violations constituted AES Ironwood's first occurrence of violations of NERC Reliability Standards; (2) AES Ironwood was cooperative throughout RFC's enforcement process; (3) there was no evidence of any attempt to conceal the violations nor evidence of intent to do so; and (4) RFC determined that the FAC-008-1 and FAC-009-1 alleged violations did not pose a serious or substantial risk to the reliability of the bulk power system because they involved missing ratings for elements that were not the most limiting factor.

Status of Mitigation Plan⁵

On November 18, 2008, AES Ironwood submitted two draft Mitigation Plans to address the alleged violations of FAC-008-1 R1 and FAC-009-1 R1. After being revised by AES Ironwood, the plans were accepted by RFC on December 18, 2008 and were approved by NERC on January 9, 2009. The Mitigation Plans for these alleged violations were designated as MIT-08-1234, and MIT-08-1235, and were submitted as non-public information to FERC on January 9, 2009 in accordance with FERC orders.

FAC-008-1 R1

In Mitigation Plan MIT-08-1234, AES Ironwood outlined the actions taken to mitigate the alleged violation, including revising the Facility Ratings Methodology document to include all required elements of FAC-008-1 R1. AES Ironwood's Mitigation Plan required it to: (1) create a work plan to satisfy the requirements contemplated in the standard and to address the RFC Audit findings; (2) develop a list, which included all affected equipment, including generators, transmission conductors, transformers, protective relays, terminal equipment and compensation devices; (3) obtain the design rating information for all affected equipment; and (4) review equipment rating information to determine the most limiting piece of equipment, inclusive of reviewing normal and emergency ratings, equipment manufacture ratings, design criteria, ambient conditions, operating limitations and other assumptions. In addition to the immediate actions undertaken by AES Ironwood, the Mitigation Plan also required AES Ironwood to revise, to the extent necessary, its draft procedure based on RFC's review and resubmit it to RFC for review by December 29, 2008.

AES Ironwood certified on March 26, 2009 that its Mitigation Plan was completed as of March 3, 2009. As evidence of completion of its Mitigation Plan, AES Ironwood submitted a formal Facility Ratings Methodology procedure, *Facility Ratings Methodology for AES Ironwood LLC*, *Revision No. 3 – November 18, 2008.* This document satisfactorily details AES Ironwood's Facility Rating Methodology in accordance with FAC-008-1 R1 for generators, generator step-up (GSU) transformers, and all terminal equipment. The methodology is based on the equipment manufacturers' manuals and the engineering design data books. The methodology includes consideration for equipment design criteria, manufacturers' ratings, ambient conditions, operating limitations, and other assumptions. The document includes the required statement from R1.1 that the Facility Rating shall equal the most limiting applicable equipment rating of the individual equipment that comprises that facility.

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⁵ See 18 C.F.R § 39.7(d)(7).

On July 10, 2009, RFC subject matter experts reviewed the Mitigation Plan and supporting evidence of its completion and in a letter dated July 10, 2009, RFC Enforcement Staff verified that the AES Ironwood Mitigation Plan was completed on March 3, 2009.

In addition to its Mitigation Plan and pursuant to the Settlement Agreement, AES Ironwood will incorporate a more active compliance program, discussed below, that will be fully implemented by August 31, 2010.

FAC-009-1 R1

In Mitigation Plan MIT-08-1235, AES Ironwood outlined the actions taken to mitigate the alleged violation, including establishing and communicating Facility Ratings for all required elements of FAC-009-1 R1. AES Ironwood took the following immediate actions: (1) created a work plan to satisfy the requirements set forth in the standard and to address the RFC Audit findings; (2) developed a list, which included all equipment identified in its revised Facility Methodology under FAC-008-1, including generators, transmission conductors, transformers, protective relays, terminal equipment and compensation devices; (3) obtained the design rating information for all affected equipment; and (4) reviewed equipment rating information to determine the most limiting piece of equipment, inclusive of reviewing normal and emergency ratings, equipment manufacture ratings, design criteria, ambient conditions, operating limitations and other assumptions.

Additionally, AES Ironwood's Mitigation Plan required it to: (1) analyze affected equipment for most limiting factor (completed November 2008); (2) establish and communicate Facility Ratings (completed November 2008); (3) complete FAC-009-1 procedure revisions (completed November 2008); and (4) to the extent necessary, revise the draft procedure based on RFC review and resubmit to RFC for review (completed December 2008).

AES Ironwood certified on March 26, 2009 that its Mitigation Plan was completed as of March 3, 2009. As evidence of completion of its Mitigation Plan, AES Ironwood submitted a formal revision of the FAC-009-1 Facility Ratings procedure, *Establish and Communicate Facility Ratings for AES Ironwood LLC, Revision No. 2 – November 18, 2008.* According to RFC, this document satisfactorily details AES Ironwood's establishment of Facility Ratings in accordance with FAC-009-1 R1 based on its approved Facility Rating Methodology from FAC-008-1 R1. The ratings include consideration for equipment design criteria, manufacturers' ratings, ambient conditions, operating limitations, and other assumptions. The final result is that the Facility Rating equals the most limiting applicable equipment rating of the individual equipment that comprises the facility.

On July 10, 2009, RFC subject matter experts reviewed the Mitigation Plan and supporting evidence of its completion and in a letter dated July 10, 2009, RFC Enforcement Staff verified that the AES Ironwood Mitigation Plan was completed on March 3, 2009.

In addition to its Mitigation Plan and pursuant to the Settlement Agreement, AES Ironwood will incorporate a more active compliance program, which is discussed below and will be fully implemented by August 31, 2010.

Compliance Program Enhancement

As part of the Settlement Agreement, AES Ironwood initiated efforts beyond its immediate mitigation of the alleged violations in order to prevent recurrence. Specifically, AES Ironwood committed to the following actions and completion dates:

Compliance Program Enhancement Content

AES Ironwood has developed and will implement a Compliance Program Enhancement to supplement its existing Ethics and Compliance program. These actions include: (a) utilizing a document management system for records management to create a single repository of all documentation related to standards compliance; (b) implementing programs to promote a culture of compliance like general awareness training; (c) implementing general business training for all job functions that includes applicable and "real world" examples of GO/GOP functions; and (d) implementing a formal internal audit to verify standards compliance. A copy of the program enhancement document is included as Attachment B to the Settlement Agreement.

Compliance Program Enhancement Milestones

According to the Settlement Agreement, AES Ironwood will take the following actions at a cost of \$177,500:

Activity	Expected Completion Date	Status
Implement Online Repository for Program	September 30, 2009	Completed
Documentation		
Initiate Online Training	March 30, 2010	
Initiate General Awareness Training	March 30, 2010	
Define Internal Audit Team	June 30, 2010	
Complete Internal Audit	August 31, 2010	
Quarterly Reports (4)	December 31, 2009 through	
	September 30, 2010.	

Compliance Program Enhancement Reporting

To facilitate RFC's need to communicate the implementation status of the activities agreed to in the Settlement Agreement and provide accountability to NERC, AES Ironwood will provide updates using the forms and format in Attachment C to the Settlement Agreement semi-annually for one year.

Statement Describing the Proposed Penalty, Sanction or Enforcement Action Imposed⁶

Basis for Determination

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008 Guidance Order, the NERC BOTCC reviewed

⁶ See 18 C.F.R § 39.7(d)(4).

⁷ North American Electric Reliability Corporation, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008).

the Settlement Agreement and supporting documentation on October 13, 2009. The NERC BOTCC approved the Settlement Agreement, including RFC'S imposition of a financial penalty, assessing a penalty of five thousand dollars (\$5,000) against AES Ironwood and other actions to facilitate future compliance required under the terms and conditions of the Settlement Agreement. In approving the Settlement Agreement, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the alleged violations at issue.

In reaching this determination, the NERC BOTCC considered the following factors:

- (1) the referenced alleged violations are the first violations of AES Ironwood of NERC Reliability Standards in RFC;
- (2) AES Ironwood was cooperative throughout the enforcement process;
- (3) there was no evidence of any attempt to conceal a violation nor evidence of intent to do so; and
- (4) the violations did not pose a serious or substantial risk to the bulk power system because they involved missing ratings for elements that were not the most limiting factor.

For the foregoing reasons, the NERC BOTCC approves the Settlement Agreement and believes that the proposed penalty of five thousand dollars (\$5,000) is appropriate for the violations addressed herein and consistent with NERC's goal to promote and ensure reliability of the bulk power system.

Pursuant to Order No. 693, the penalty will be effective upon expiration of the 30 day period following the filing of this Notice of Penalty with FERC, or, if FERC decides to review the penalty, upon final determination by FERC.

⁸ The NERC BOTCC notes that the registered entity does not receive direct or offset credit for money spent for actions to mitigate the violation or for any additional money spent above and beyond what is required to mitigate the violation.

Attachments to be Included as Part of this Notice of Penalty

The attachments to be included as part of this Notice of Penalty are the following documents and material:

- a) Compliance Audit Report-Public Version dated April 18, 2008, included as Attachment a;
- b) Settlement Agreement by and between AES Ironwood and RFC executed August 31, 2009, included as Attachment b;
 - i) RFC's Verifications of Completion of the Mitigation Plans, dated July 10, 2009, included as Attachment A to the Settlement Agreement;
 - ii) AES Ironwood's Compliance Program Enhancement, included as Attachment B to the Settlement Agreement;
 - iii) RFC's Settlement Activity Reporting Form, included as Attachment C to the Settlement Agreement;
 - iv) AES Ironwood's Mitigation Plans designated as MIT-08-1234 and MIT-08-1235 submitted December 18, 2008, 9 included as Attachment D to the Settlement Agreement; and:
 - v) AES Ironwood's Certifications of Completion of the Mitigation Plans submitted March 26, 2009, included as Attachment E to the Settlement Agreement.

A Form of Notice Suitable for Publication 10

A copy of a notice suitable for publication is included in Attachment c.

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⁹ The Mitigation Plans are dated November 18, 2008, the date the draft plans were submitted.

¹⁰ See 18 C.F.R § 39.7(d)(6).

Notices and Communications

Notices and communications with respect to this filing may be addressed to the following:

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Conclusion

NERC respectfully requests that the Commission accept this Notice of Penalty as compliant with its rules, regulations and orders.

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Respectfully submitted,

cc: AES Ironwood, LLC Reliability *First* Corporation

Attachments



Attachment a

Compliance Audit Report-Public Version, dated April 18, 2008



Compliance Audit Report

AES Ironwood NCR00664

April 1-2, 2008

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Executive Summary

AES Ironwood is registered as a Generation Owner (GO) and a Generation Operator (GOP) within the Reliability *First* region.

The off-site compliance audit of AES Ironwood was conducted, by Reliability *First* Corporation on April 1-4, 2008 at the Reliability *First* offices located in Fairlawn, Ohio. In preparation for the audit, AES Ironwood supplied various materials as evidence of compliance with the applicable requirements for fourteen (14) NERC reliability standards and one (1) Reliability *First standard*. The audit team reviewed and evaluated all the material supplied by AES Ironwood. The audit team found AES Ironwood had two (2) possible violation(s) and was in compliance with the applicable requirements in the seven (7) NERC reliability standards. One (1) Reliability First standard and six (5) NERC reliability standards were found not applicable to AES Ironwood.

There were no ongoing mitigation plans and therefore none were reviewed by the audit team

For the possible violations, this audit report will include information explaining the rationale that supports the finding of the possible compliance violation. This information will be used to help determine the violation severity level and the appropriate sanctions and penalties. All compliance violation(s) and any related actions will be processed through the Reliability *First* and NERC Compliance Monitoring and Enforcement Program.

Audit Process

The compliance audit process steps are detailed in the NERC Compliance Monitoring and Enforcement Program (CMEP). The NERC CMEP generally conforms to the United States Government Accountability Office Government Auditing Standards and other generally accepted audit practices.

Objectives

All Registered Entities are subject to audit for compliance with all reliability standards applicable to the functions for which the Registered Entity is registered. The audit objectives are:

- Review AES Ironwood compliance with the requirements of the reliability standards that are applicable to AES Ironwood based on AES Ironwood registered functions.
- Validate compliance with applicable reliability standards from the NERC 2008 Implementation Plan list of actively monitored standards.
- Validate evidence of self-reported violations, review the status of associated mitigation plans, and confirm compliance of previous submitted self-certifications.
- Document the AES Ironwood compliance culture.

¹ North American Electric Reliability Corporation CMEP, paragraph 3.1, Compliance Audits

Scope

A compliance audit included all reliability standards applicable to AES Ironwood monitored in the 2008 NERC Implementation Plans for the period June 18, 2007 to March 31, 2008.and other reliability standards applicable to the Registered Entity. The scope of the off-site compliance audit was part of the regularly scheduled cycle and was not due to or as part of a compliance investigation.

AES Ironwood is subject to monitoring by Reliability *First* on a six year basis. This audit was conducted on those standards which were provided by NERC for monitoring in the 2008 CMEP Implementation Plan. Reliability *First* monitors all applicable Reliability *First* standards, self certifications and mitigation plans as appropriate.

Confidentiality and Conflict of Interest

Confidentiality and Conflict of Interest of the audit team are governed under the Reliability *First* Delegation Agreement with NERC and the NERC Rules and Procedures Section 1500. AES Ironwood was informed of the Reliability *First* obligations and responsibilities under the agreement and procedures. The work history for each audit team member was provided to AES Ironwood. AES Ironwood was given an opportunity to object to an audit team member on the basis of a possible conflict of interest or the existence of other circumstances that could interfere with the audit team member's impartial performance of duties. AES Ironwood has not submitted any objections by the stated fifteen day objection due date and by this action has accepted the audit team member participants without objections.

All individuals of the audit team, that audited AES Ironwood, are members of the Reliability *First* Staff and are bound by the NERC Rules of Procedure and the confidentiality that is within that FERC filed document.

Off-site Audit

AES Ironwood is subject to an audit once every six years, at the minimum, as provided by the NERC Rules and Procedures. Sixty (60) days prior to this scheduled audit, AES Ironwood had been provided with a pre-audit package which included all the necessary documents and information, required by NERC and Reliability *First*, to complete the audit process. This pre-audit package included the following:

- 60 day Notification letter which contained request for evidence, information and data submittals
- Audit Survey
- Audit Agenda as applicable
- Audit Team Work History with discussion of objection process
- General Instructions of Data or Information Submittals
- Reliability Standard Auditor Worksheets (RSAWs)

• Reliability Standard Questionnaires

Documents were provided to AES Ironwood in both electronic and hardcopy format.

Reliability *First* had discussed with AES Ironwood the usage of technical experts and agreed to allow the usage of technical experts by AES Ironwood as it deemed necessary to explain their compliance to the reliability standards.

AES Ironwood had been notified to provide any technical experts or personnel it deemed necessary to provide an understanding of the evidence provided to meet compliance.

Due to the limited scope of this audit, the audit team leader did not request interviews with AES Ironwood employees representing subject matter expertise regarding all of registered functions of AES Ironwood.

At times, and according to the generally accepted government auditing standard 3.31, auditors were to use professional judgment in planning and performing audits and attestation engagements and in reporting the results.

Additionally, and with the generally accepted government auditing standard 3.39, while this standard places responsibility on each auditor and audit organization to exercise professional judgment in planning and performing an audit or attestation engagement, it does not imply unlimited responsibility, nor does it imply infallibility on the part of either the individual auditor or the audit organization. Absolute assurance is not attainable because of the nature of evidence and the characteristics of fraud. Professional judgment does not mean eliminating all possible limitations or weaknesses associated with a specific audit, but rather identifying, considering, minimizing, mitigating, and explaining them.

An audit agenda had been provided to AES Ironwood in advance to allow the necessary time to prepare for the audit. Reliability *First* and the audit team appreciated AES Ironwood cooperation and flexibility with the agenda.

Methodology

Reliability *First* conducted this audit via an off-site method. Sixty (60) days prior to this scheduled audit, AES Ironwood had been provided with a pre-audit package which included all the necessary documents and information, required by NERC and Reliability *First*, to complete the audit process. Upon receipt and review of the submitted information the audit team conducted a review of the information and evidence for compliance to the applicable standards. With reviews completed on applicable requirements, the audit team conducted an exit briefing to provide the entity with the team findings. A report is complied with review of the audited entity in both a public a non-public version which is submitted to the audited entity and NERC for posting upon completion. The off-site audits followed the following format.

Opening Briefing/Audit Overview

An Opening Briefing was conducted as a conference call to discuss the following:

- Introduction of audit team
- Audit Objective and Scope
- Team Audit Expectations
- Discussion on Clarification Calls
- Audit Process
- Exit Briefing and schedule

Audit

When there was concern that the supporting evidence did not meet the intent of the requirement, clarification calls and or clarification e-mails were sent to the entity for additional detail, clarification and or additional evidence in the form of examples. AES Ironwood was NOT permitted to create new documents and or edit existing material and or documents that were provided as evidence.

Exit Briefing

An exit briefing was conducted with a presentation, via phone, for the off-site audit of AES Ironwood. The Reliability *First* audit team and the AES Ironwood team participated. The audit process was again reviewed. Possible violations were identified and were reviewed during the discussion of our preliminary results. AES Ironwood was provided an opportunity to ask questions that the audit team addressed.

Company Profile

AES Ironwood registered as a Generator Owner in May of 2006 and as a Generator Operator in February of 2008. PJM is the Reliability Coordinator, Balancing Authority, and Transmission Operator in the area AES Ironwood resides.

AES Ironwood is a wholly owned subsidiary of AES. AES Ironwood is a Combined Cycle Gas Turbine Plant located in Lebanon, PA and interconnected with First Energy at 230kV. AES Ironwood services one (1) customer, Bear Energy LP under the terms and provisions of a power purchase agreement. AES Ironwood owns three (3) 230 MVA units wholly owned by AES Ironwood. AES Ironwood operates in a 24/7 environment with a facility dispatch criteria under the power purchase agreement having a one (1) hour startup notification lead time.

Audit Specifics

The compliance audit was conducted on April 1 & 2, 2008 at the Reliability *First* Offices in Fairlawn, Ohio.

Reliability First Audit Team consisted of:

Audit Team Role	Name	Title	Company
Lead	Bob Berglund	Senior Engineer	Reliability First
Member	Bob Wargo	Manager of Compliance Enforcement	Reliability First

AES Ironwood Audit Participants consisted of:

Title	Organization
Operations Manager	AES Ironwood
Plant Manager	AES Ironwood

Audit Results

The evidence was reviewed and validated during the offsite audit by reading and reviewing the material provided as evidence towards compliance. Each applicable standard and requirement was read and the evidence provided measured against the requirement. Where the evidence was not deemed sufficient or a clarification was required, he audited entity was contacted and asked to provide additional detail and/or examples of how compliance was met. No new documents were permitted or edits to existing documents allowed. Examples of adherence to compliance needed to be in the form of real-time applications and/or dated material to prove the entity's process and/or procedures were being followed.

Findings

The following table details the summarized auditor notes relating to evidence reviewed for compliance with the reliability standards listed in the NERC 2008 Implementation Plan. This table also includes the details summarizing auditor notes relating to evidence reviewed for reliability standard requirements.

Standards and Requirements that were reviewed and that are applicable to AES Ironwood:

Reliability Standard	Requirement	Finding
EOP-009-0	R1	Not Applicable
EOP-009-0	R2	Not Applicable
FAC-002-0	R1	Compliant
FAC-002-0	R2	Compliant
FAC-008-1	R1	Possible Violation
FAC-008-1	R2	Compliant

Reliability Standard	Requirement	Finding
FAC-008-1	R3	Compliant
FAC-009-1	R1	Possible Violation
FAC-009-1	R2	Compliant
IRO-004-1	R4	Compliant
MOD-010-0	R1	Compliant
MOD-010-0	R2	Compliant
MOD-012-0	R1	Compliant
MOD-012-0	R2	Compliant
PRC-004-1	R2	Compliant
PRC-004-1	R3	Compliant
PRC-005-1	R1	Compliant
PRC-005-1	R2	Compliant
PRC-015-0	R1	Not Applicable
PRC-015-0	R2	Not Applicable
PRC-015-0	R3	Not Applicable
PRC-016-0	R1.	Not Applicable
PRC-016-0	R2.	Not Applicable
PRC-016-0	R3.	Not Applicable
PRC-017-0	R1.	Not Applicable
PRC-017-0	R2.	Not Applicable
PRC-018-1	R1	Not Applicable
PRC-018-1	R2	Not Applicable
PRC-018-1	R3	Not Applicable
PRC-018-1	R4	Not Applicable
PRC-018-1	R5	Not Applicable
PRC-018-1	R6	Not Applicable
VAR-002-1	R4	Compliant
VAR-002-1	R5	Compliant
EOP-007-RFC-01	R4.	Not Applicable

Compliance Culture

AES Ironwood does not have a formal internal compliance program. It is evident from the documentation provided supporting compliance to the reliability standards, that. AES Ironwood supports compliance to the standards and is making every effort to update their documentation to reflect this effort.



Attachment b

Settlement Agreement by and between AES Ironwood and RFC, executed August 31, 2009



In re AES IRONWOOD LLC)	DOCKET NUMBERS
NERC Registry ID# NCR00664)	RFC200800046
)	RFC200800047

SETTLEMENT AGREEMENT OF RELIABILITYFIRST CORPORATION AND AES IRONWOOD, LLC

I. INTRODUCTION

1. Reliability *First* Corporation ("Reliability *First*") and AES Ironwood, LLC ("AES Ironwood") enter into this Settlement Agreement ("Agreement") to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in Reliability *First*'s determination and findings, pursuant to the North American Electric Reliability Corporation ("NERC") Rules of Procedure, of alleged violations by AES Ironwood of the NERC Reliability Standards FAC-008-1, Requirement 1; and FAC-009-1, Requirement 1.

II. STIPULATION OF FACTS - AES IRONWOOD AND RELIABILITY FIRST

2. The facts stipulated herein are stipulated solely for the purpose of resolving between AES Ironwood and Reliability *First* the matters discussed herein and do not constitute stipulations or admissions for any other purpose. AES Ironwood and Reliability *First* hereby stipulate and agree to the following:

A. Background

- 3. AES Ironwood is a Generator Owner (GO) and Generator Operator (GOP) operating in Lebanon, Pennsylvania. AES Ironwood serves one customer under the terms and provisions of a Power Purchase Agreement ("PPA"). AES Ironwood is an approximately 710 gross MW Combined Cycle Gas Turbine Plant, with three 230 MVA units, that is interconnected with First Energy at 230kV.
- 4. On June 18, 2007, the start date of the alleged violations, AES Ironwood was registered on the NERC Compliance Registry as a Generator Owner (GO) and a Generator Operator (GOP) with the NERC Registry Identification Number of NCR00664, and is, therefore, subject to compliance with FAC-008-1, Requirement 1; and FAC-009-1, Requirement 1.

B. Alleged Violation of FAC-008-1, Requirement 1 - RFC200800046

- 5. NERC Reliability Standard FAC-008-1, "Facility Ratings Methodology," Requirement 1, states in part, "The Transmission Owner and Generator Owner shall each document its current methodology used for developing Facility Ratings (Facility Ratings Methodology) of its solely and jointly owned Facilities. The methodology shall include...[a] statement that a Facility Rating shall equal the most limiting applicable Equipment Ratings of the individual equipment that comprises that Facility...[t]he method by which the Rating...is determined.
 - R1.2.1. The scope of equipment addressed shall include, but not be limited to, generators, transmission conductors, transformers, relay protective devices, terminal equipment, and series and shunt compensation devices."
- 6. From April 1, 2008 to April 2, 2008, AES Ironwood participated in an off-site Compliance Audit including all NERC Reliability Standards applicable to Generator Owners (GO) and Generator Operators (GOP). Reliability First Compliance Staff found a possible violation of FAC-008-1, Requirement 1, regarding documentation and methodology for developing ratings for its generating facility. Specifically, AES Ironwood's documentation and methodology for developing ratings for its facility was incomplete as it did not include all required equipment, specifically transmission conductors, transformers, relay protective devices, terminal equipment, and compensation devices (note: AES Ironwood does not have compensation devices).
- 7. Reliability First Compliance Staff reviewed the document submitted by AES Ironwood entitled "Facility Ratings Methodology for AES Ironwood Related to NERC Standard FAC-008-1" (Initial Revision, Reviewed December 2007, submitted for Compliance Audit, April 2008). In the document, AES Ironwood provided documentation and methodology for developing ratings solely for generating facilities.
- 8. On August 4, 2008, in response to the initial draft of the Compliance Audit Report, AES Ironwood responded to Reliability *First* Compliance Staff ("AES Ironwood Letter"). The AES Ironwood Letter, addressing the findings for FAC-008-1, indicated, that the record reflects that (1) AES Ironwood's methodology was centered upon the capability of the facility as a whole (citing Federal Energy Regulatory Commission ("Commission") Order No. 693 at P 765), (2) the methodology implicitly includes all equipment at the facility as the facility was designed to deliver the capacity from the facility as a whole, and (3) information on the manufacturers' normal and emergency ratings for all transmission conductors, protective relay equipment, and terminal equipment existed and was readily available.

9. Reliability *First* alleges that AES Ironwood failed to effectively implement a Facility Ratings Methodology for its facility compliant with the NERC Reliability Standard FAC-008-1, Requirement 1.

C. Alleged Violation of FAC-009-1, Requirement 1 - RFC200800047

- 10. NERC Reliability Standard FAC-009-1, "Establish and Communicate Facility Ratings," Requirement 1, states, "The Transmission Owner and Generator Owner shall each establish Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings Methodology."
- 11. From April 1, 2008 to April 2, 2008, AES Ironwood participated in an off-site Compliance Audit including all NERC Reliability Standards applicable to Generator Owners (GO) and Generator Operators (GOP). Reliability *First* Compliance Staff found a possible violation of FAC-009-1, Requirement 1, Establishment and Communication of Facility Ratings. Specifically, because AES Ironwood did not include the full scope of equipment in its Facility Rating Methodology, compliance to FAC-009-1, Requirement 1 could not be supported.
- 12. Reliability *First* Compliance Staff reviewed the document submitted by AES Ironwood entitled "Establish and Communicate Facilities Ratings for AES Ironwood" (dated December 2007, submitted for Compliance Audit, April 2008). Facility ratings were provided for AES Ironwood's generation, which were from test results in 2006 and 2007, but no facility ratings were provided for equipment other than generators. The scope of equipment was incomplete as the methodology did not reference all required equipment.
- 13. AES Ironwood, in accordance with PJM Manual 21, provided generation facility ratings, but failed to provide established ratings for equipment other than the generators.
- 14. On August 4, 2008, in response to the initial Compliance Audit Report, AES Ironwood responded to Reliability *First* Compliance Staff with the AES Ironwood Letter. The AES Ironwood Letter, addressing the finding of Possible Alleged Violation for FAC-009-1, indicated, that "because the ratings methodology is based on the capability of the facility and the equipment was selected based on their ratings so that the capability of the facility could be delivered to the transmission grid, the manufacturers' ratings are implicitly included in the capability rating of the facility provided for FAC-009-1, R1."
- 15. Reliability *First* alleges that AES Ironwood failed to establish and communicate ratings for equipment that was not included in AES Ironwood's Facility Ratings Methodology compliant with the NERC Reliability Standard FAC-009-1, Requirement 1.

III. RELIABILITY FIRST AND AES IRONWOOD'S SEPARATE REPRESENTATIONS

A. Statement of Reliability First and Summary of Findings as to AES Ironwood

- 16. Reliability *First* considers this Agreement as the resolution of all issues with regards to the above captioned docket numbers and to bind AES Ironwood in the commitment to perform actions hereafter enumerated and listed as conditions for this Agreement.
- 17. The alleged violation of FAC-008-1, Requirement 1 has a Violation Risk Factor ("VRF") of "Lower," consistent with the Violation Risk Factor Matrix from the NERC December 17, 2007 Compliance Filing. The duration of this alleged violation, for purposes of penalty determination, is from June 18, 2007, the date the NERC Reliability Standards became enforceable, to November 18, 2008, the date AES Ironwood submitted an acceptable Mitigation Plan to Reliability *First*. Pursuant to rulings of the Commission, such penalties may be applied on a daily basis for the duration of the violation.
- 18. The alleged violation of FAC-009-1, Requirement 1 has a VRF of "Medium," consistent with the Violation Risk Factor Matrix from the NERC December 17, 2007 Compliance Filing. The duration of this alleged violation, for purposes of penalty determination, is from June 18, 2007, the date the NERC Reliability Standards became enforceable, to November 18, 2008, the date AES Ironwood submitted an acceptable Mitigation Plan to Reliability *First*. Pursuant to rulings of the Commission, such penalties may be applied on a daily basis for the duration of the violation.
- 19. Reliability *First* agrees that this Agreement is in the best interest of the parties and in the best interest of Bulk Electric System reliability.

B. Statement of AES Ironwood

20. AES Ironwood neither admits nor denies that the facts set forth and agreed to by the parties for purposes of this Agreement constitute alleged violations of FAC-008-1, Requirement 1, and FAC-009-1, Requirement 1. AES Ironwood states that the documentation issues that serve as the basis of the alleged violations reflect the need to refine its written procedures and documentation but do not compromise reliability on the Bulk Electric System. AES Ironwood has not previously been subject to a compliance audit concerning mandatory reliability standards, many of which had only recently come into effect. Necessarily, AES Ironwood was subject to a learning curve with respect to the level of documentation required for the above-identified reliability standards as well as the type of information to be provided to Reliability First during an off-site audit process. As reflected in publicly available compliance statistics,

FAC-008-1, and FAC-009-1 are among the reliability standards with which many registered entities have experienced findings of potential non-compliance. AES Ironwood has worked closely with Reliability First to address the alleged violations by putting in place procedures that more precisely capture Reliability First's requirements for compliance with FAC-008-1, Requirement 1, and FAC-009-1, Requirement 1. Such actions reflect that, consistent with its Compliance Program, AES Ironwood takes compliance with the reliability standards seriously. AES Ironwood's Compliance Program is subject to a corporate Code of Conduct, and is implemented and administered at the AES Ironwood legal entity level. The overall responsibility for the program is with AES Ironwood's Plant Manager/President and is administered through Team Leaders based on functional responsibility. AES Ironwood's Compliance Program has the support and participation of senior management. AES Ironwood's Plant Manager/President has direct access to AES Ironwood's Board of Directors. In connection with the alleged violations, AES Ironwood has committed to the enhancements to its Compliance Program as discussed below to further strengthen compliance with reliability standards.

21. AES Ironwood has agreed to enter into this Agreement with Reliability *First* to avoid extended litigation with respect to the matters described or referred to herein, to avoid uncertainty, and to effectuate a complete and final resolution of the issues set forth herein. AES Ironwood agrees that this Agreement is in the best interest of the parties and in the best interest of maintaining a reliable electric infrastructure.

IV. MITIGATING ACTIONS, REMEDIES AND SANCTIONS FOR AES IRONWOOD

22. On July 2, 2008, AES Ironwood submitted a written request to ReliabilityFirst stating its interest in pursuing settlement discussion with ReliabilityFirst. On July 3, 2008, ReliabilityFirst provided a written response acknowledging AES Ironwood's request and deferring discussions while Reliability First continued the processing of the Compliance Audit Report. On August 19, 2008, Reliability First and Outside Counsel for AES Ironwood commenced preliminary discussions. In response to those discussions, Outside Counsel for Reliability First and Outside Counsel for AES Ironwood engaged in drafting a waiver letter with respect to settlement confidentiality issues in connection with AES Ironwood's Outside Counsel's representation of three AES Ironwood affiliates that were subject to Compliance Audits. On October 1, 2008, Assistant General Counsel for the AES Corporation submitted the waiver letter indicating Outside Counsel would be the contact person for AES Ironwood and its three affiliates that were the subject of enforcement actions within the Reliability First region, and there would be no issues with confidentiality between the four separate entities. Procedures for settlement discussions were developed by Reliability First. On December 17, 2008, ReliabilityFirst provided AES Ironwood with a copy of the ReliabilityFirst

- Guidelines for Settlement Discussions. ReliabilityFirst also provided guidance to AES Ironwood regarding submission of Mitigation Plans during the settlement process.
- 23. On November 18, 2008, AES Ironwood submitted to Reliability First two separate Mitigation Plans to address the possible [alleged] violations set forth in the Compliance Audit Report. AES Ironwood submitted Mitigation Plans for FAC-008-1, Requirement 1 (NERC Mitigation Plan ID# MIT-08-1234), and for FAC-009-1, Requirement 1 (NERC Mitigation Plan ID# MIT-08-1235), which Reliability First reviewed. After a phone call between AES Ironwood Staff and Reliability First Compliance Staff, AES Ironwood amended its Mitigation Plans and submitted the amended Mitigation Plans on December 18, 2008, which were accepted by Reliability First on December 18, 2008. On December 22, 2008, Reliability First submitted the Mitigation Plans to NERC. On January 9, 2009, NERC approved the amended Mitigation Plans and that same day submitted the amended Mitigation Plans to the Commission as confidential, non-public information. On March 26, 2009, AES Ironwood submitted to Reliability First Certifications of Mitigation Plan Completion for FAC-008-1, Requirement 1, and FAC-009, Requirement 1.
- 24. In the Mitigation Plan for FAC-008-1, Requirement 1, NERC Mitigation Plan ID# MIT-08-1234, AES Ironwood outlined the actions taken to mitigate the alleged violation. AES Ironwood stated, among other things, that it (i) developed a list, which included all affected equipment, (ii) obtained the design rating information for all affected equipment, and (iii) reviewed equipment rating information to determine the most limiting piece of equipment, inclusive of reviewing normal and emergency ratings, equipment manufacturer ratings, design criteria, ambient conditions, operating limitations and other assumptions.
- 25. In addition to the immediate actions undertaken by AES Ironwood, the Mitigation Plan also provide an additional Key Milestone Activity completed by AES Ironwood in order to ensure compliance to NERC Reliability Standard FAC-008-1, Requirement 1:
 - a. To the extent necessary, revise draft procedure based on RFC [(Reliability First)] review and resubmit to RFC for review.
 (By December 29, 2008)
- 26. Reliability *First* reviewed the evidence AES Ironwood submitted in support of its certification of completion of the Mitigation Plan. Reliability *First* performed an audit-like review to verify that all actions specified in the Mitigation Plan were successfully completed. On July 10, 2009, Reliability *First* verified that the Mitigation Plan was completed in accordance with its terms (*see* Attachment A, "Summary and Review of Evidence of Mitigation Plan Completion, FAC-008-1").

- 27. In the Mitigation Plan for FAC-009-1, Requirement1, NERC Mitigation Plan ID# MIT-08-1235, AES Ironwood outlined the immediate actions taken to mitigate the alleged violation. AES Ironwood stated, that it (i) created a work plan to satisfy the requirements contemplated in the standard and to address the Reliability First Audit Findings, (ii) developed a list, which included all equipment identified in its revised Facility Methodology under FAC-008-1, (iii) obtained the design rating information for all affected equipment, and (iv) reviewed equipment rating information to determine the most limiting piece of equipment, inclusive of reviewing normal and emergency ratings, equipment manufacturer ratings, design criteria, ambient conditions, operating limitations and other assumptions.
- 28. In addition to the immediate actions undertaken by AES Ironwood, the Mitigation Plan also provided a list of four additional Key Milestone Activities completed by AES Ironwood:
 - a. Analyze affected equipment for most limiting factor. (Completed November 2008)
 - b. Establish and Communicate Facility Ratings. (Completed November 2008)
 - c. Complete FAC-009[-1] Procedure Revisions. (Completed November 2008)
 - d. To the extent necessary, revise draft procedure based on RFC review and resubmit to RFC for review. (Completed December 2008)
- 29. Reliability *First* reviewed the evidence AES Ironwood submitted in support of its certification of completion of the Mitigation Plan. Reliability *First* performed an audit-like review to verify that all actions specified in the Mitigation Plan were successfully completed. On July 10, 2009, Reliability *First* verified that the Mitigation Plan was completed in accordance with its terms (*see* Attachment A, "Summary and Review of Evidence of Mitigation Plan Completion, FAC-009-1").
- 30. For purposes of settling any and all disputes arising from Reliability *First*'s investigation into the matters discovered by Reliability *First* auditors during the Compliance Audit of April 1-2, 2008, Reliability *First* and AES Ironwood agree that for the period of September 1, 2009 through August 31, 2010, AES Ironwood shall take the actions set forth in Attachment B with respect to the development and implementation of the "Compliance Program Enhancement" for AES Ironwood to supplement the AES Ethics and Compliance program. AES Ironwood and Reliability *First* further agree that any auditing by Reliability *First* of actions or expenditures covered by this Agreement shall take

place within six (6) months of the latest of the actual completion dates of the actions listed in the table below. AES Ironwood and Reliability *First* also agree that AES Ironwood has taken or shall take the following actions:

Activity	Dates to be completed
i. Implement On-line Repository for Program Documentation	Sept. 30, 2009
ii. Initiate On-line Training	Mar 30, 2010
iii. Initiate General Awareness Training	Mar. 30, 2010
iv. Define Internal Audit Team	Jun. 30, 2010
v. Complete Internal Audit	Aug 31, 2010
vi. Quarterly Reports	Dec. 31, 2009/Mar. 31,
	2010/June 30,
	2010/Sept. 30, 2010

- 31. It is understood that Reliability *First* Staff shall audit the progress of any remedies of this Agreement through a site inspection, interviews, and/or request for documentation to validate progress of any remedies of this Agreement. Reliability *First* shall reasonably coordinate audits and information requests with AES Ironwood related to this Agreement. In order to facilitate Reliability *First*'s need to communicate the status and provide accountability to NERC, AES Ironwood will provide status updates quarterly. AES Ironwood will submit these status updates to Reliability *First* in accordance with the confidentiality provisions of Section 1500 of the NERC Rules of Procedure and on the form set forth in Attachment B.
- 32. AES Ironwood has completed and Reliability *First* has verified completion of all actions necessary to mitigate the alleged violations and achieve compliance. AES Ironwood may be subject to future compliance audits, spot checks, or mandatory status updates in order to facilitate Reliability *First*'s need to communicate the status and provide accountability to NERC.
- 33. The estimated costs to AES Ironwood to implement the agreed to actions in this Section IV are approximately \$177,500. Reliability *First* may request and review financial records to validate actual expenditures with estimates in this Agreement. Actual expenditures may deviate from the approximated costs above, but to the extent there is a reduction in expenditures that adversely impacts implementation of the Compliance Program Enhancement such reduction should be documented and explained.
- 34. Based on the above actions taken or to be taken by AES Ironwood, AES Ironwood shall pay \$5,000 to Reliability First. However, if AES Ironwood fails to complete the actions described above, Reliability First reserves the right to assess and collect a monetary penalty, to impose a sanction, or otherwise impose enforcement actions. AES Ironwood shall retain all rights to defend against such additional enforcement actions in accordance with NERC Rules of Procedure.

- Reliability *First* shall present an invoice to AES Ironwood within twenty days after the Agreement is either approved by the Commission or by operation of law, and Reliability *First* shall notify the NERC if the payment is not received.
- 35. Failure to make a timely penalty payment or to comply with any of the terms and conditions agreed to herein, or any other conditions of this Agreement, shall be deemed to be either the same possible violations that initiated this Settlement and/or additional violation(s) and may subject AES Ironwood to new or additional enforcement, penalty or sanction actions in accordance with the NERC Rules of Procedure. AES Ironwood shall retain all rights to defend against such additional enforcement actions in accordance with NERC Rules of Procedure.
- 36. If AES Ironwood does not make the monetary penalty payment above at the times agreed by the parties, interest payable to Reliability *First* will begin to accrue pursuant to the Commission's regulations at 18 C.F.R. § 35.19(a)(2)(iii) from the date that payment is due, in addition to the penalty specified above.
- 37. The terms and conditions of the Agreement are consistent with the regulations and orders of the Commission, as well as with the NERC Rules of Procedure.

V. ADDITIONAL TERMS

- 38. The signatories to this Agreement agree that they enter into this Agreement voluntarily and that, other than the recitations set forth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent or representative of Reliability *First* or AES Ironwood has been made to induce the signatories or any other party to enter into this Agreement.
- 39. Reliability *First* shall report the terms of all settlements of compliance matters to NERC. NERC will review the settlement for the purpose of evaluating its consistency with other settlements entered into for similar possible violations or under other, similar circumstances. Based on this review, NERC will either approve the settlement or reject the settlement and notify Reliability *First* and AES Ironwood of changes to the settlement that would result in approval. If NERC rejects the settlement, NERC will provide specific written reasons for such rejection and Reliability *First* will attempt to negotiate a revised settlement agreement with AES Ironwood including any changes to the settlement specified by NERC. If a settlement cannot be reached, the enforcement process shall continue to conclusion. If NERC approves the settlement, NERC will (i) report the approved settlement to the Commission for the Commission's review and approval by order or operation of law, and (ii) publicly post the alleged violations and the terms provided for in the settlement.

- 40. This Agreement shall become effective upon the Commission's approval of this Agreement by order or operation of law as submitted to it or as modified in a manner acceptable to the parties.
- 41. AES Ironwood agrees that this Agreement, when approved by NERC and the Commission, shall represent a final settlement of all matters set forth herein and AES Ironwood waives its right to further hearings and appeal, unless and only to the extent that AES Ironwood contends that any NERC or Commission action on this Agreement contains one or more material modifications to this Agreement.
- 42. Reliability *First* reserves all rights to initiate enforcement, penalty or sanction actions against AES Ironwood in accordance with the NERC Rules of Procedure in the event that AES Ironwood fails to comply with the mitigation plan and compliance program agreed to in this Agreement. In the event AES Ironwood fails to comply with any of the stipulations, remedies, sanctions or additional terms, as set forth in this Agreement, Reliability *First* will initiate enforcement, penalty, or sanction actions against AES Ironwood to the maximum extent allowed by the NERC Rules of Procedure, up to the maximum statutorily allowed penalty. AES Ironwood shall retain all rights to defend against such enforcement actions, also according to the NERC Rules of Procedure.
- 43. AES Ironwood consents to the use of Reliability *First's* determinations, findings, and conclusions set forth in this Agreement for the purpose of assessing the factors, including the factor of determining the AES Ironwood's history of violations, that are set forth in the May 15, 2008 Revised Policy Statement on Enforcement, or that may be set forth in any successor policy statement or order. Such use may be in any enforcement action or compliance proceeding under taken by Reliability *First*, provided however that AES Ironwood does not consent to the use of the specific acts set forth in this Agreement as the sole basis for any other action or proceeding brought by Reliability *First*, nor does AES Ironwood consent to the use of this Agreement by any other party in any other action or proceeding.
- 44. Each of the undersigned warrants that he or she is an authorized representative of the entity designated, is authorized to bind such entity and accepts this Agreement on the entity's behalf.

¹ Revised Policy Statement on Enforcement, 123 FERC ¶ 61,221 (2008)

- 45. The undersigned representative of each party affirms that he or she has read this Agreement, that all of the matters set forth in this Agreement are true and correct to the best of his or her knowledge, information and belief, and that he or she understands that this Agreement is entered into by such party in express reliance on those representations, provided, however, that such affirmation by each party's representative shall not apply to the other party's statements of position set forth in Section III of this Agreement.
- 46. This Agreement may be signed in counterparts.
- 47. This Agreement is executed in duplicate, each of which so executed shall be deemed to be an original.

Agreed to and accepted:

Raymond J. Palmieri

Vice President and Director of Compliance

ReliabilityFirst Corporation

Date / 6/09

Kenneth W. Daycock

Plant Manager

AES Ironwood, LLC

8/31/09

Approved by:

Tinh Gallagher

President

ReliabilityFirst Corporation

8/28/=

Date

Attachment A

Summary and Review of Evidence of Mitigation Plan Completion

(FAC-008-1, R1, dated July 10, 2009)

(FAC-009-1, R1, dated July 10, 2009)



July 10, 2009

Summary and Review of Evidence of Mitigation Plan Completion

NERC Violation ID #: RFC20080046 NERC Plan ID: MIT-08-1234

Registered Entity; AES Ironwood, LLC

NERC Registry ID: NCR00664 Standard: FAC-008-1

Requirement: R1

Status: Complete

Review Process:

During the off-site compliance audit of AES Ironwood LLC conducted April 2-4, 2008, it was discovered that AES Ironwood LLC was not compliant with FAC-008-1 R1. Overall evidence indicated that the methodologies used for developing facility ratings were only based on generator capability testing and voltage support service. Other equipment limitations such as transformers, conductors, terminal equipment and relay protection devices did not appear to be considered. Evidence did not provide normal ratings for full scope of required equipment such as conductors and relay protective devices. Evidence did not provide emergency ratings for full scope of required equipment such as the generator, conductors, transformers, relay protective devices and terminal equipment.

AES Ironwood, LLC developed a Mitigation Plan for FAC-008-1 R1 dated November 18, 2008 (amended December 18, 2008) to address the above referenced violation. This Mitigation Plan was subsequently approved by Reliability *First* and NERC (MIT-08-1234).

AES Ironwood, LLC certified via E-mail dated March 26, 2009 that this Mitigation Plan for FAC-008-1 R1 has been completed. Reliability *First* requested and received evidence of completion for actions taken by AES Ironwood, LLC as specified in the Mitigation Plan. Reliability *First* performed an in-depth review and analysis of the information provided to verify that all actions specified in the Mitigation Plan were successfully completed. As a result, a conference call was held on July 1, 2009, and Reliability First requested AES Ironwood LLC to include ratings for conductors in the switchyard. This information was provided via E-mail on July 7, 2009.

FAC-008-1, R1 states:

R1. The Transmission Owner and Generator Owner shall each document its current methodology used for developing Facility Ratings (Facility Ratings Methodology) of its solely and jointly owned Facilities. The methodology shall include all of the following:

Summary and Review of Evidence of Mitigation Plan Completion AES Ironwood, LLC July 10, 2009 Page 2 of 2

- **R1.1.** A statement that a Facility Rating shall equal the most limiting applicable Equipment Rating of the individual equipment that comprises that Facility.
- **R1.2.** The method by which the Rating (of major BES equipment that comprises a Facility) is determined.
 - **R1.2.1.** The scope of equipment addressed shall include, but not be limited to, generators, transmission conductors, transformers, relay protective devices, terminal equipment, and series and shunt compensation devices.
 - **R1.2.2.** The scope of Ratings addressed shall include, as a minimum, both Normal and Emergency Ratings.
- *R1.3.* Consideration of the following:
 - **R1.3.1.** Ratings provided by equipment manufacturers.
 - **R1.3.2.** Design criteria (e.g., including applicable references to industry Rating practices such as manufacturer's warranty, IEEE, ANSI or other standards).
 - R1.3.3. Ambient conditions.
 - *R1.3.4. Operating limitations.*
 - R1.3.5. Other assumptions.

Evidence Submitted:

R1: <u>Facility Ratings Methodology for AES Ironwood LLC, Revision No. 3 - November</u> 18, 2008

This document satisfactorily details their facility rating methodology in accordance with FAC-008-1 R1 for Generators, Generator Step-up (GSU) Transformers, and all Terminal Equipment. The methodology is based on the equipment manufacturers' manuals and the engineering design data books. The methodology includes consideration for equipment design criteria, manufacturers' ratings, ambient conditions, operating limitations, and other assumptions. The document includes the required statement from R1.1 that the facility rating shall equal the most limiting applicable equipment rating of the individual equipment that comprises that facility.

Status: Complete

ATTACHMENT A

Summary and Review of Evidence of Mitigation Plan Completion AES Ironwood, LLC July 10, 2009 Page 3 of 3

Review Results:

Reliability *First* Corporation reviewed the evidence AES Ironwood, LLC submitted in support of its Certification of Completion. On July 10, 2009 Reliability *First* verified that the Mitigation Plan was completed in accordance with their terms and has therefore deemed AES Ironwood, LLC compliant to the aforementioned NERC Reliability Standard.

Respectfully Submitted,

Robert K. Wargo

Robert K. Wargo

Manager of Compliance Enforcement

Reliability First Corporation



July 10, 2009

Summary and Review of Evidence of Mitigation Plan Completion

NERC Violation ID #: RFC20080047 NERC Plan ID: MIT-08-1235

Registered Entity; AES Ironwood, LLC

NERC Registry ID: NCR00664 Standard: FAC-009-1

Requirement: R1

Status: Complete

Review Process:

During the off-site compliance audit of AES Ironwood LLC conducted April 2-4, 2008, it was discovered that AES Ironwood LLC was not compliant with FAC-009-1 R1. Since the full scope of required equipment was not addressed in FAC-008-1 R1, compliance to this requirement could not be supported. The scope of equipment did not include transmission conductors, transformers, relay protective devices, terminal equipment, and series and shunt compensation.

AES Ironwood, LLC developed a Mitigation Plan for FAC-009-1 R1 dated November 18, 2008 (amended December 18, 2008) to address the above referenced violation. This Mitigation Plan was subsequently approved by Reliability First and NERC (MIT-08-1235).

AES Ironwood, LLC certified via E-mail dated March 26, 2009 that this Mitigation Plan for FAC-009-1 R1 has been completed. Reliability *First* requested and received evidence of completion for actions taken by AES Ironwood, LLC as specified in the Mitigation Plan. Reliability *First* performed an in-depth review and analysis of the information provided to verify that all actions specified in the Mitigation Plan were successfully completed. As a result, a conference call was held on July 1, 2009, and Reliability First requested AES Ironwood LLC to include ratings for conductors in the switchyard. This information was provided via E-mail on July 3, 2009.

FAC-009-1, R1 states:

R1. The Transmission Owner and Generator Owner shall each establish Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings Methodology.

Evidence Submitted:

Summary and Review of Mitigation Plan Completion AES Ironwood, LLC July 10, 2009 Page 2 of 2

R1: Establish and Communicate Facility Ratings for AES Ironwood LLC, Revision No. 2 - November 18, 2008

This document satisfactorily details their establishment of facility ratings in accordance with FAC-009-1 R1 based on their approved facility rating methodology from FAC-008-1 R1. The ratings include consideration for equipment design criteria, manufacturers' ratings, ambient conditions, operating limitations, and other assumptions. The final result is that the facility rating equals the most limiting applicable equipment rating of the individual equipment that comprises the facility. The "Attachment A" to this document provides their ratings for all the appropriate equipment associated with their facility.

Status: Complete

Review Results:

Reliability First Corporation reviewed the evidence AES Ironwood, LLC submitted in support of its Certification of Completion. On July 10, 2009 Reliability First verified that the Mitigation Plan was completed in accordance with their terms and has therefore deemed AES Ironwood, LLC compliant to the aforementioned NERC Reliability Standard.

Respectfully Submitted,

Robert K. Wargo Manager of Compliance Enforcement Reliability *First* Corporation

Attachment B

Compliance Program Enhancement

COMPLIANCE PROGRAM ENHANCEMENT

1. Program Documentation

To enhance compliance with applicable NERC and RFC reliability standards, the AES Ironwood LLC proposes to utilize a web-based document control system ("DCS") for records management. The DCS provides for the following key attributes:

- Maintain the master copy of each AES RFC Businesses' reliability compliance materials on-line for all four regional businesses to access and review;
- ii. Allow for easy access of each reliability standards as well as provide a reliable source for tracking changes with the reliability standards;
- iii. Establish an area to post questions, a common calendar to list all up and coming events related to reliability as well as blogs to share and disseminate information; and
- iv. Links to reliability-related websites, including NERC and RFC, and additional resources.

The use of the DCS will improve compliance by creating a single repository of all documentation in support of compliance with applicable NERC and regional reliability standards, as well as increase access to the documentation for the AES RFC Businesses. This will improve the ability of operating personnel and support staff to locate and identify proper operating procedures and data, determine the origin of documents, the level of approval, and whether a document is the latest, most up to date version. Additionally, the DCS will result in increased knowledge of what documents exist and where, improved availability and security of critical documents, improved capture, preservation, and sharing of information and knowledge, enhanced accountability, increased awareness of NERC and RFC reliability standards, and increased responsiveness to audit requests. Document indexing and cross referencing will also provide an additional level of document management.

Further, the DCS provides a forum for exchanging information among AES Beaver Valley, LLC, AES Ironwood LLC, AES Red Oak, LLC, and AES Warrior Run, LLC (collectively the "AES RFC Businesses") an area for monitoring ongoing NERC and RFC activities, including upcoming events, as well the establishment of web-links to reliability-related websites and resources.

2. Program Dissemination and General Awareness Training

AES Ironwood currently has a NERC compliance program in place at the business unit level, which is designed to ensure that required compliance practices are in place. The program includes self-assessment and enforcement of internal controls to prevent violations and reoccurrence of all inadvertent violations. In addition, the program includes staff training on the applicable NERC standards, development of procedures, and includes attendance in RFC and NERC related workshops.

a. Consultant

To enhance compliance with applicable NERC and RFC reliability standards, AES Ironwood proposes to collectively use an outside reliability consultant to provide key support in the areas of documentation, technical support, and training.

In the areas of documentation and technical support, the consultant will:

- i. Review overall compliance documentation with the AES RFC Businesses;
- ii. Provide technical support throughout the year should any specific questions or concerns arise; and
- Conduct a review of all applicable reliability standards with the AES RFC Businesses to ensure new or revised reliability standards are incorporated into their compliance programs.

In the area of training, the consultant will offer on-line training to help ensure that individual employees understand the standards with which they must comply. The on-line training will be conducted using a web-based portal. The use of an on-line training program will (i) enable plant personnel to complete the training modules on their own schedule, (ii) provide a detailed analysis of each individual's score, which will allow AES Ironwood to determine where there may be a need for additional training, and (iii) provide a record of which programs have been completed and when, facilitating the monitoring and completion of training modules.

b. General Awareness Training

A General Awareness Training program will also be developed that draws on existing training programs, but also focuses on a corporate culture of compliance and places an emphasis on continual communication between employees and management about compliance issues and questions that may arise in the compliance context. When complete, the Compliance Program and its components will be communicated to all affected employees through the General Awareness Training. The program will consist of dissemination of the Compliance Program documents to affected employees. This process will also be incorporated into the orientation procedure for new employees impacted by the Compliance Program. A representative from AES Corporation will be available for questions regarding the Compliance Program during the seminars, and ongoing to ensure the program comprehension by all employees. Upper level management representatives will also provide routine communications to employees as appropriate to indicate high-level support for this program. The training portion of the program will consist of the following:

- i. An initial training seminar for AES Ironwood that will (i) review all of the required program details, (ii) educate personnel on the purpose of system reliability standards, and (iii) administer a general knowledge test to gauge information retention; and
- ii. Annual training seminars for AES Ironwood that will (i) review all of the required program details, (ii) provide continuing education to the personnel on the purpose of system reliability standards, (iii) undertake a general knowledge test to gauge information retention; and (iv) identify additional ways to enhance the program.

3. Formal, Internal Self-Auditing for Compliance with Applicable Reliability Standards

For the most part, AES Ironwood does not have internal audit programs. To enhance compliance with applicable NERC and RFC reliability standards, AES Ironwood proposes to collectively use an outside reliability consultant to conduct internal audits. The audits will be used to ensure compliance with the applicable reliability standards while verifying that the appropriate level of knowledge for reliability compliance is met. The consultant will also be used to train on the proper techniques for conducting audits.

Because reliability standards are constantly evolving and interpretation of the standards can also change, it is important to have an internal audit program formed by personnel that will closely monitored the standards. Due to the sheer number of reliability standards and requirements, there are efficiencies to be gained by the AES RFC Businesses doing this together instead of individually. Under the proposed formal internal audit program, a manager will perform administrative duties for the program while an executive sponsor committee (vice president level and above) and a steering committee will provide direction to the team leads and program sponsorship. Personnel will be assigned responsibilities for each of the applicable NERC and Regional reliability standards. Specifically, the plan takes each applicable standard and identifies a primary team lead responsibility. The applicable reliability standards will be closely monitored throughout the year. These teams will be able to monitor how each standard is interpreted by RFC, NERC, and FERC and provide required revisions to procedures and compliance. Annually, personnel from one or more of the AES RFC Businesses will conduct internal audits of selected NERC and RFC reliability standards to verify ongoing and continuous compliance with standards applicable to the AES RFC Businesses.

To facilitate the self-auditing and other programs, the AES RFC Businesses plan on using resources from each of the AES RFC Businesses as well as representatives from corporate offices. This is expected to not only increase overall coordination across the businesses, but also aid management in consistently implementing the culture of compliance. Employees involved with the implementation of programs will also work closely with RFC (and NERC where appropriate) to ensure there is a high level of information shared with the AES RFC Businesses as well as attend the various workshops regularly to keep up with up and coming issues.

Attachment C

Reliability First Corporation
Settlement Activity Reporting Form

[reproduce on Registered Entity Letterhead]

Date:

Reliability First Corporation Settlement Activity Reporting Form

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tes completed

Attachment D

Mitigation Plans (MIT-08-1234, MIT-08-1235)

(FAC-008-1, R1, dated November 18, 2008) (FAC-009-1, R1, dated November 18, 2008)



Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: 18 November 2008

Section A: Compliance Notices & Mitigation Plan Requirements

- A.1 Notices and requirements applicable to Mitigation Plans and this Submittal Form are set forth in "Attachment A Compliance Notices & Mitigation Plan Requirements."
- A.2 This form must be used to submit required Mitigation Plans for review and acceptance by Reliability *First* and approval by NERC.
- A.3 I have reviewed Attachment A and understand that this Mitigation Plan Submittal Form will not be accepted unless this box is checked.

Section B: Registered Entity Information

B.1 Identify your organization.

Company Name: AES Ironwood LLC

Company Address: 305 Prescott Rd Lebanon, PA 17042

NERC Compliance Registry ID: NCR00664

B.2 Identify the individual in your organization who will be the Entity Contact regarding this Mitigation Plan.

Name: John Morgan

Title: Technical Support Leader

Email: john.morgan@aes.com

Phone: (717) 228-1328 x102



Section C: Identification of Alleged or Confirmed Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following Alleged or Confirmed violation(s) of the reliability standard listed below.

NERC	Reliability	Requirement	Violation	Alleged or	Method of
Violation ID	Standard	Number	Risk Factor	Confirmed	Detection (e.g.,
#				Violation Date ^(*)	Audit, Self-report,
					Investigation)
RFC200800 046	FAC-008-1	R1	Lower	4/11/2008	Audit

- (*) Note: The Alleged or Confirmed Violation Date shall be expressly specified by the Registered Entity, and subject to modification by Reliability *First*, as: (i) the date the Alleged or Confirmed violation occurred; (ii) the date that the Alleged or Confirmed violation was self-reported; or (iii) the date that the Alleged or Confirmed violation has been deemed to have occurred on by Reliability *First*. Questions regarding the date to use should be directed to the Reliability *First* contact identified in Section G of this form.
- C.2 Identify the cause of the Alleged or Confirmed violation(s) identified above. Additional detailed information may be provided as an attachment.

The potential violation identified in the Compliance Audit Report is as follows:

FAC-008-1 (R1) AES Ironwood provided a document "Facilities Ratings Methodology for AES Ironwood" dated December 2007 which referenced facility ratings for generators and voltage regulators. Reference was also made to PJM Manual 21 "Rules and Procedures for Determination of Generator Capability" which AES Ironwood follows. No documentation or methodology for developing ratings its for its transmission conductors, transformers, relay protective devices, terminal equipment, and compensation devices was included in this material.

Note: If a formal root cause analysis evaluation was performed, submit a copy of the summary report.

C.3 Provide any additional relevant information regarding the Alleged or Confirmed violations associated with this Mitigation Plan. Additional detailed information may be provided as an attachment.



AES Ironwood provided written comments in response to the Compliance Audit dated June 10 2008, questioning findings included therein. Those comments are attached.

Section D: Details of Proposed Mitigation Plan

Mitigation Plan Contents

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the Alleged or Confirmed violations identified above in Part C.1 of this form. Additional detailed information may be provided as an attachment.

Action Plan: Reformat and Revise Procedures in relation to FAC-008-1 Standard to ensure compliance.

Actions Taken:

- 1. Reviewed RFC Audit Findings reproduced in Section C.2, above.
- 2. Reviewed FAC-008-1 Standard and its requirements.
- 3. Created work plan, envisioning the requirements contemplated in the standard and addressing the RFC Audit Findings reproduced in Section C.2, above, as reflected in Section D Table 1, below.
- 4. Developed Affected Equipment List, including generators, transmission conductors, transformers, protective relays, terminal equipment, and compensation devices.
- 5. Obtained affected equipment design rating information.
- 6. Reviewed Equipment rating information to determine most limiting piece of equipment, inclusive of reviewing normal and emergency ratings, equipment manufacturer ratings, design criteria, ambient conditions, operating limitations and other assumptions.
- 7. Draft procedure documenting Facility Rating Methodology for submittal and review by RFC.
- 8. To the extent necessary, revise draft procedure based on RFC review and resubmit to RFC for review.

Mitigation Plan Timeline and Milestones

D.2 Provide the date by which full implementation of the Mitigation Plan will be, or has been, completed with respect to the Alleged or Confirmed violations identified above. State whether the Mitigation Plan has been fully implemented, and/or whether the actions necessary to assure the entity has returned to full compliance have been completed.



With the development of the revised compliance procedure documentation for NERC Reliability Standard FAC-008-1, AES Ironwood's documentation will meet the compliance requirements set forth in the standard. The revised procedure fully mitigates the potential violation as to NERC Reliability Standard FAC-008-1. The revised procedure will be provided to RFC for review by December 29, 2008. Upon acceptance of the revised procedure by RFC, AES Ironwood will have completed this Mitigation Plan.

D.3 Enter Key Milestone Activities (with due dates) that can be used to track and indicate progress towards timely and successful completion of this Mitigation Plan.

Key Milestone Activity	Proposed/Actual Completion Date*
	(shall not be more than 3 months apart)
R1. Review Ratings Methodology	Completed Nov 2008
Standard	
R1. Develop Affected Equipment List	Completed Nov 2008
R1. Obtain Affected Equipment Design	Completed Nov 2008
Info	
R1. Created Rating Methodology	Completed Nov 2008
Procedure document addressing all	
affected equipment.	
R1. Analyze affected equipment for most	Completed Nov 2008
limiting factor.	
Complete FAC-008 Procedure Revisions	Completed Nov 2008
To the extent necessary, revise draft	Completed December 29, 2008
procedure based on RFC review and	
resubmit to RFC for review	
Resubmit draft procedure for RFC review	Submit by December 29, 2008**
To the extent necessary, revise procedure	Subject to RFC review schedule
based on RFC input.	
Mitigation Plan Completion Date	Subject to RFC review schedule

^(*) Note: Additional violations could be determined for not completing work associated with accepted milestones.

^(**) Note: The date is the date by which AES Ironwood will provide its draft procedure to RFC for review. The actual completion date will be subject to RFC's review process.



Section D – Table 1

(1) AES Ironwood provided a document "Facilities Ratings Methodology for AES Ironwood" dated December 2007 which referenced facility ratings for generators and voltage regulators. (2) Reference was also made to PJM Manual 21 "Rules and Procedures for Determination of Generator Capability" which AES Ironwood follows. (3)No documentation or methodology for developing ratings its for its transmission conductors, transformers, relay protective devices, terminal equipment, and compensation devices was included in this material.

FAC-008-1 R1.

The Facility Ratings Methodology for AES Ironwood procedure will be modified to:

- (1) Remove testing as determining the Facility Rating.
- (2) Remove the PJM Manual 21 Rules & Procedures for Determination of Generating Capability.
 Remove the reference to the PJM Net Capability Verification Report.
 Remove the Ironwood Test Data Summary with the data from two test runs.

Ironwood will then be modified to address:
(3) Reliability Standard FAC-008-1
Requirement 1. Therefore other
equipment limitations such as
transformers, conductors, terminal
equipment, and relay protection devices
will be considered. Normal and
Emergency ratings of this equipment will

The Facility Ratings Methodology for AES

The above modifications will be addressed in the latest revision to the Facility Ratings Methodology for AES Ironwood Procedure.

be addressed.



Section E: Interim and Future Reliability Risk

Abatement of Interim BPS Reliability Risk

E.1 While your organization is implementing this Mitigation Plan the reliability of the Bulk Power System (BPS) may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take to mitigate this increased risk to the reliability of the BPS. Additional detailed information may be provided as an attachment.

Not applicable

Prevention of Future BPS Reliability Risk

E.2 Describe how successful completion of this Mitigation Plan by your organization will prevent or minimize the probability that the reliability of the BPS incurs further risk of similar violations in the future. Additional detailed information may be provided as an attachment.

The successful completion of the Mitigation Plan will have established RFC-approved compliance procedures for NERC Reliability Standard FAC-008-1. The implementation of the revised procedure will avoid the risk of a similar violation in the future.



Section F: Authorization

An authorized individual must sign and date this Mitigation Plan Submittal Form. By doing so, this individual, on behalf of your organization:

- a) Submits this Mitigation Plan for acceptance by Reliability *First* and approval by NERC, and
- b) If applicable, certifies that this Mitigation Plan was completed on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- c) Acknowledges:
 - 1. I am Technical Support Leader of AES Ironwood.
 - 2. I am qualified to sign this Mitigation Plan on behalf of AES Ironwood.
 - 3. I have read and am familiar with the contents of this Mitigation Plan.
 - 4. AES Ironwood LLC agrees to comply with, this Mitigation Plan, including the timetable completion date, as accepted by Reliability *First* and approved by NERC.

Authorized Individual Signature

Name (Print): John Morgan

Title: Technical Support Leader

Date: 18 December 2008

Section G: Regional Entity Contact

Please direct completed forms or any questions regarding completion of this form to the Reliability *First* Compliance e-mail address mitigationplan@rfirst.org.

Please indicate the company name and reference the NERC Violation ID # (if known) in the subject line of the e-mail. Additionally, any Reliability *First* Compliance Staff member is available for questions regarding the use of this form. Please see the contact list posted on the Reliability *First* Compliance web page.



Attachment A – Compliance Notices & Mitigation Plan Requirements

- I. Section 6.2 of the CMEP¹ sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:
 - (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan.
 - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
 - (3) The cause of the Alleged or Confirmed Violation(s).
 - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
 - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
 - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
 - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
 - (8) Key implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined for not completing work associated with accepted milestones.
 - (9) Any other information deemed necessary or appropriate.
 - (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self-Certification or Self Reporting submittals.
- II. This submittal form must be used to provide a required Mitigation Plan for review and acceptance by Reliability *First* and approval by NERC.
- III. This Mitigation Plan is submitted to Reliability *First* and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
- IV. This Mitigation Plan Submittal Form may be used to address one or more related Alleged or Confirmed violations of one Reliability Standard. A separate

¹ "Compliance Monitoring and Enforcement Program" of the ReliabilityFirst Corporation;" a copy of the current version approved by the Federal Energy Regulatory Commission is posted on the ReliabilityFirst website.



- mitigation plan is required to address Alleged or Confirmed violations with respect to each additional Reliability Standard, as applicable.
- V. If the Mitigation Plan is accepted by Reliability *First* and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission in accordance with applicable Commission rules, regulations and orders.
- VI. Reliability *First* or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
- VII. Remedial action directives also may be issued as necessary to ensure reliability of the BPS.



DOCUMENT CONTROL

Title: Mitigation Plan Submittal Form

Issue: Version 2.0

Date: 11 July 2008

Distribution: Public

Filename: ReliabilityFirst Mitigation Plan Submittal Form - Ver 2.DOC

Control: Reissue as complete document only

DOCUMENT APPROVAL

Prepared By	Approved By	Approval Signature	Date
Robert K. Wargo	Raymond J. Palmieri		
Senior Consultant	Vice President and	Raymond J. Palmien	1/2/08
Compliance	Director	o after the first the same	1,2,00
-	Compliance		

DOCUMENT CHANGE/REVISION HISTORY

Version	Prepared By	Summary of Changes	Date
1.0	Robert K. Wargo	Original Issue – Replaces "Proposed Mitigation Plan" Form	1/2/08
		Revised email address from	
2.0	Tony Purgar	compliance@rfirst.org to mitigationplan@rfirst.org	7/11/08

RFC200800047 MP#: MIT-08-1235



Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: 18 November 2008

Section A: Compliance Notices & Mitigation Plan Requirements

- A.1 Notices and requirements applicable to Mitigation Plans and this Submittal Form are set forth in "Attachment A Compliance Notices & Mitigation Plan Requirements."
- A.2 This form must be used to submit required Mitigation Plans for review and acceptance by Reliability *First* and approval by NERC.
- A.3 I have reviewed Attachment A and understand that this Mitigation Plan Submittal Form will not be accepted unless this box is checked.

Section B: Registered Entity Information

B.1 Identify your organization.

Company Name: AES Ironwood LLC

Company Address: 305 Prescott Rd Lebanon, PA 17042

NERC Compliance Registry ID: NCR00664

B.2 Identify the individual in your organization who will be the Entity Contact regarding this Mitigation Plan.

Name: John Morgan

Title: Technical Support Leader

Email: john.morgan@aes.com

Phone: (717) 228-1328 x102



Section C: Identification of Alleged or Confirmed Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following Alleged or Confirmed violation(s) of the reliability standard listed below.

NERC	Reliability	Requirement	Violation	Alleged or	Method of
Violation ID	Standard	Number	Risk Factor	Confirmed	Detection (e.g.,
#				Violation Date ^(*)	Audit, Self-report,
					Investigation)
RFC200800 047	FAC-009-1	R1	Medium	4/11/2008	Audit

(*) Note: The Alleged or Confirmed Violation Date shall be expressly specified by the Registered Entity, and subject to modification by Reliability *First*, as: (i) the date the Alleged or Confirmed violation occurred; (ii) the date that the Alleged or Confirmed violation was self-reported; or (iii) the date that the Alleged or Confirmed violation has been deemed to have occurred on by Reliability *First*. Questions regarding the date to use should be directed to the Reliability *First* contact identified in Section G of this form.

C.2 Identify the cause of the Alleged or Confirmed violation(s) identified above. Additional detailed information may be provided as an attachment.

The potential violation identified in the Compliance Audit Report is as follows:

FAC-009-1 (R1) AES Ironwood provided a document "Facilities Ratings Methodology for AES Ironwood" AES Ironwood" added December 2007 which referenced facility ratings for generators and voltage regulators. Facility ratings were provided for its generation which were from test results in 2007 and 2006 in accordance within PJM Manual 21. No facility ratings were provided equipment other than the generators.

Note: If a formal root cause analysis evaluation was performed, submit a copy of the summary report.

C.3 Provide any additional relevant information regarding the Alleged or Confirmed violations associated with this Mitigation Plan. Additional detailed information may be provided as an attachment.



AES Ironwood provided written comments in response to the Compliance Audit dated June 10, 2008, questioning findings included therein. Those comments are attached.

Section D: Details of Proposed Mitigation Plan

Mitigation Plan Contents

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the Alleged or Confirmed violations identified above in Part C.1 of this form. Additional detailed information may be provided as an attachment.

Action Plan: Reformat and Revise Procedures in relation to FAC-009-1 Standard to ensure compliance.

Actions Taken:

- 1. Reviewed RFC Audit Findings reproduced in Section C.2, above.
- 2. Reviewed FAC-009-1 Standard and its requirements.
- 3. Created work plan, envisioning the requirements contemplated in the standard addressing the RFC Audit Findings reproduced in Section C.2, above, as reflected in Section D Table 1, below.
- 4. Developed Affected Equipment List, including generators, transmission conductors, transformers, protective relays, terminal equipment, and compensation devices, as per the Facility Methodology Contemplated in FAC-008-1.
- 5. Obtained affected equipment design rating information.
- 6. Reviewed Equipment rating information to determine most limiting piece of equipment, inclusive of reviewing normal and emergency ratings, equipment manufacturer ratings, design criteria, ambient conditions, operating limitations and other assumptions.
- 7. Draft procedure documenting Facility Rating Methodology for submittal and review by RFC.
- 8. To the extent necessary, revise draft procedure based on RFC review and resubmit to RFC for review.

Mitigation Plan Timeline and Milestones

D.2 Provide the date by which full implementation of the Mitigation Plan will be, or has been, completed with respect to the Alleged or Confirmed violations identified above. State whether the Mitigation Plan has been fully implemented,



and/or whether the actions necessary to assure the entity has returned to full compliance have been completed.

With the development of revised compliance procedure documentation for NERC Reliability Standard FAC-009-1, AES Ironwood's documentation will meet the compliance requirements set forth in the standard. The revised procedure will fully mitigate the potential violation as to NERC Reliability Standard FAC-009-1. The revised procedure will be provided to RFC for review by December 29, 2008. Upon acceptance of the revised procedure by RFC, AES Ironwood will have completed this Mitigation Plan.

D.3 Enter Key Milestone Activities (with due dates) that can be used to track and indicate progress towards timely and successful completion of this Mitigation Plan.

Key Milestone Activity	Proposed/Actual Completion Date*
	(shall not be more than 3 months apart)
R1. Review Ratings Methodology	Completed Nov 2008
Standard	
R1. Develop Affected Equipment List	Completed Nov 2008
R1. Obtain Affected Equipment Design	Completed Nov 2008
Info	
R1. Analyze affected equipment for most	Completed Nov 2008
limiting factor.	
R1. Establish and Communicate Facility	Completed Nov 2008
Ratings.	
Complete FAC-009 Procedure Revisions	Completed Nov 2008
To the extent necessary, revise draft	Complete by December 29, 2008
procedure based on RFC review and	
resubmit to RFC for review	
Resubmit draft procedure for RFC review	Submit by December 29, 2008**
To the extent necessary, revise procedure	Subject to RFC review schedule
based on RFC input.	
Mitigation Plan Completion Date	Subject to RFC review schedule

^(*) Note: Additional violations could be determined for not completing work associated with accepted milestones.

^(**) Note: The date is the date by which AES Ironwood will provide its draft procedure to RFC for review. The actual completion date will be subject to RFC's review process.



Section D – Table 1

FAC-009-1 R1.

FAC-009-1 (R1) AES Ironwood provided a document "Facilities Ratings Methodology for AES Ironwood" AES Ironwood provided a document "Establishing and Communication Facilities Ratings for AES Ironwood" dated December 2007 which referenced facility ratings for generators and voltage regulators. Facility ratings were provided for its generation which were from test results in 2007 and 2006 in accordance within PJM Manual 21. No facility ratings were provided equipment other than the generators.

The Establish and Communicate Facility Ratings for AES Ironwood Procedure will be modified to reflect the revised Facility Ratings Methodology for AES Ironwood. The scope of additional equipment will include transmission conductors, transformers, relay protective devices, terminal equipment, and series and shunt compensation.

The above modifications will be addressed in the latest revision to the Establish and Communicate Facility Ratings for AES Ironwood Procedure



Section E: Interim and Future Reliability Risk

Abatement of Interim BPS Reliability Risk

E.1 While your organization is implementing this Mitigation Plan the reliability of the Bulk Power System (BPS) may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take to mitigate this increased risk to the reliability of the BPS. Additional detailed information may be provided as an attachment.

Not applicable

Prevention of Future BPS Reliability Risk

E.2 Describe how successful completion of this Mitigation Plan by your organization will prevent or minimize the probability that the reliability of the BPS incurs further risk of similar violations in the future. Additional detailed information may be provided as an attachment.

The successful completion of the Mitigation Plan will have established RFC-approved compliance procedures for NERC Reliability Standard FAC-009-1. The implementation of the revised procedure will avoid the risk of a similar violation in the future.



Section F: Authorization

An authorized individual must sign and date this Mitigation Plan Submittal Form. By doing so, this individual, on behalf of your organization:

- a) Submits this Mitigation Plan for acceptance by Reliability *First* and approval by NERC, and
- b) If applicable, certifies that this Mitigation Plan was completed on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- c) Acknowledges:
 - 1. I am Technical Support Leader of AES Ironwood.
 - 2. I am qualified to sign this Mitigation Plan on behalf of AES Ironwood.
 - 3. I have read and am familiar with the contents of this Mitigation Plan.
 - 4. AES Ironwood agrees to comply with, this Mitigation Plan, including the timetable completion date, as accepted by Reliability *First* and approved by NERC.

Authorized Individual Signature

Name (Print): John Morgan

Title: Technical Support Leader

Date: 18 December 2008

Section G: Regional Entity Contact

Please direct completed forms or any questions regarding completion of this form to the Reliability *First* Compliance e-mail address mitigationplan@rfirst.org.

Please indicate the company name and reference the NERC Violation ID # (if known) in the subject line of the e-mail. Additionally, any Reliability *First* Compliance Staff member is available for questions regarding the use of this form. Please see the contact list posted on the Reliability *First* Compliance web page.

RFC200800047 MP#: MIT-08-1235



Attachment A – Compliance Notices & Mitigation Plan Requirements

- I. Section 6.2 of the CMEP¹ sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:
 - (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan.
 - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
 - (3) The cause of the Alleged or Confirmed Violation(s).
 - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
 - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
 - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
 - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
 - (8) Key implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined for not completing work associated with accepted milestones.
 - (9) Any other information deemed necessary or appropriate.
 - (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self-Certification or Self Reporting submittals.
- II. This submittal form must be used to provide a required Mitigation Plan for review and acceptance by Reliability *First* and approval by NERC.
- III. This Mitigation Plan is submitted to Reliability *First* and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
- IV. This Mitigation Plan Submittal Form may be used to address one or more related Alleged or Confirmed violations of one Reliability Standard. A separate

¹ "Compliance Monitoring and Enforcement Program" of the ReliabilityFirst Corporation;" a copy of the current version approved by the Federal Energy Regulatory Commission is posted on the ReliabilityFirst website.



- mitigation plan is required to address Alleged or Confirmed violations with respect to each additional Reliability Standard, as applicable.
- V. If the Mitigation Plan is accepted by Reliability *First* and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission in accordance with applicable Commission rules, regulations and orders.
- VI. Reliability *First* or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
- VII. Remedial action directives also may be issued as necessary to ensure reliability of the BPS.



DOCUMENT CONTROL

Title: Mitigation Plan Submittal Form

Issue: Version 2.0

Date: 11 July 2008

Distribution: Public

Filename: ReliabilityFirst Mitigation Plan Submittal Form - Ver 2.DOC

Control: Reissue as complete document only

DOCUMENT APPROVAL

Prepared By	Approved By	Approval Signature	Date
Robert K. Wargo	Raymond J. Palmieri		
Senior Consultant	Vice President and	Raymond J. Palmien	1/2/08
Compliance	Director	and sur of farmer	1,2,00
-	Compliance		

DOCUMENT CHANGE/REVISION HISTORY

Version	Prepared By	Summary of Changes	Date
1.0	Robert K. Wargo	Original Issue – Replaces "Proposed Mitigation Plan" Form	1/2/08
		Revised email address from	
2.0	Tony Purgar	compliance@rfirst.org to mitigationplan@rfirst.org	7/11/08

Attachment E

Certification of Mitigation Plan Completion

(FAC-008-1, R1, dated March 26, 2009)

(FAC-009-1, R1, dated March 26, 2009)



Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for Reliability First Corporation to verify completion of the Mitigation Plan. Reliability First Corporation may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: AES Ironwood LLC

NERC Registry ID:NCR00664

Date of Submittal of Certification: March 26, 2009

NERC Violation ID No(s):RFC200800046

Reliability Standard and the Requirement(s) of which a violation was mitigated:FAC-008-1

Date Mitigation Plan was scheduled to be completed per accepted Mitigation Plan:March 3, 2009

Date Mitigation Plan was actually completed: March 3, 2009

Additional Comments (or List of Documents Attached):Revisied FAC-008-1 Procedure for AES Ironwood

I certify that the Mitigation Plan for the above named violation has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: John Morgan

Title:Technical Support Leader

Email:john.morgan@aes.com

Phone:717 228-1328

Authorized Signature

DateMarch 26, 2009



Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for Reliability First Corporation to verify completion of the Mitigation Plan. Reliability First Corporation may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: AES Ironwood LLC

NERC Registry ID:NCR00664

Date of Submittal of Certification: March 26, 2009

NERC Violation ID No(s):RFC200800047

Reliability Standard and the Requirement(s) of which a violation was mitigated:FAC-009-1

Date Mitigation Plan was scheduled to be completed per accepted Mitigation Plan:March 3, 2009

Date Mitigation Plan was actually completed: March 3, 2009

Additional Comments (or List of Documents Attached):Revisied FAC-009-1 Procedure for AES Ironwood

I certify that the Mitigation Plan for the above named violation has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name:John Morgan

Title:Technical Support Leader

Email:john.morgan@aes.com

Phone:717 228-1328

Authorized Signature

DateMarch 26, 2009



Attachment c

Notice of Filing

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

AES Ironwood, LLC

Docket No. NP10-___-000

NOTICE OF FILING November 13, 2009

Take notice that on November 13, 2009, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding AES Ironwood, LLC in the Reliability *First* Corporation region.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at http://www.ferc.gov. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.

This filing is accessible on-line at http://www.ferc.gov, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, D.C. There is an "eSubscription" link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email FERCOnlineSupport@ferc.gov, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: [BLANK]

Kimberly D. Bose, Secretary