

September 30, 2010

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

# Re: NERC Abbreviated Notice of Penalty regarding Post Oak Wind, LLC, FERC Docket No. NP10-\_\_-000

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Abbreviated Notice of Penalty (NOP) regarding Post Oak Wind, LLC (Post Oak), with information and details regarding the nature and resolution of the violation<sup>1</sup> discussed in detail in the Disposition Document attached hereto (Attachment a), 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)).<sup>2</sup>

On May 22, 2008, Post Oak was issued a verbal directive by the Electric Reliability Council of Texas, Inc. (ERCOT) Independent System Operator (ISO) to increase VAR production to assist a low voltage situation on the grid. On November 3, 2008, during a Spot Check, Texas Reliability Entity, Inc. (Texas RE)<sup>3</sup> confirmed that Post Oak did not follow a directive issued by ERCOT in violation of IRO-001-1 Requirement (R) 8 and did not provide VAR support directed by ERCOT in violation of VAR-002-1 R2. This NOP is being filed with the Commission because Post Oak

<sup>&</sup>lt;sup>1</sup> For purposes of this document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation. <sup>2</sup> Pulse Comparison Confirmed violation.

<sup>&</sup>lt;sup>2</sup> 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 (2010). 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).

<sup>&</sup>lt;sup>3</sup> NERC delegated authority to Texas Reliability Entity, Inc. to become the regional entity for the ERCOT region effective July 1, 2010, pursuant to Section 215(e)(4) of the Federal Power Act. NERC also delegated to Texas Reliability Entity, Inc. the authority and responsibility for the continuation of all compliance monitoring and enforcement activities that it had previously delegated to Texas Regional Entity (a division of Electric Reliability Council of Texas, Inc.). The term "Texas RE" is used herein to refer to both Texas Regional Entity and Texas Reliability Entity, Inc.

does not dispute the violations of IRO-001-1 R8 and VAR-002-1 R2 and the assessed one hundred ninety-eight thousand six hundred dollar (\$198,600) penalty. Accordingly, the violations identified as NERC Violation Tracking Identification Numbers TRE200800061 and TRE200800062 are Confirmed Violations, as that term is defined in the NERC Rules of Procedure and the CMEP.

# **Statement of Findings Underlying the Violations**

This NOP incorporates the findings and justifications set forth in the Notice of Confirmed Violation and Proposed Penalty or Sanction (NOCV) issued on May 4, 2010, by Texas RE. The details of the findings and the basis for the penalty are set forth in the Disposition Document. This NOP filing contains the basis for approval of this NOP by the NERC Board of Trustees Compliance Committee (BOTCC). In accordance with Section 39.7 of the Commission's Regulations, 18 C.F.R. § 39.7, NERC provides the following summary table identifying each violation of a Reliability Standard at issue in this NOP.

Region	Registered Entity	NOC ID	NERC Violation ID	Reliability Std.	Req. (R)	VRF	Total Penalty (\$)
Texas RE	Post Oak Wind, LLC	NOC-550	TRE200800061	IRO-001-1 <sup>4</sup>	8	High	140,000
Texas RE	Post Oak Wind, LLC	NOC-550	TRE200800062	VAR-002-1 <sup>5</sup>	1	Medium	58,600

# Statement Describing the Assessed Penalty, Sanction or Enforcement Action Imposed<sup>6</sup>

# **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 and October 26, 2009 Guidance Orders,<sup>7</sup> the NERC BOTCC reviewed the NOCV and supporting documentation on July 12, 2010. The NERC BOTCC approved the NOCV and the assessment of a one hundred ninety-eight thousand six hundred dollar (\$198,600) financial penalty against Post Oak based upon Texas RE's findings and determinations, the NERC BOTCC's review of the applicable requirements of the

<sup>&</sup>lt;sup>4</sup> IRO-001-1 was enforceable from June 18, 2007 through May 12, 2009. IRO-001-1.1 is the current enforceable Standard as of May 13, 2009. The subsequent interpretation adopted errata changes and does not change the meaning or language of the original NERC Reliability Standard and its requirements. For consistency in this filing, the original NERC Reliability Standard, IRO-001-1, is used throughout.

<sup>&</sup>lt;sup>5</sup> VAR-002-1 was enforceable from August 2, 2007 through August 27, 2008. VAR-002-1a was approved by the Commission and became enforceable on August 28, 2008. VAR-002-1.1a is the current enforceable Standard as of May 13, 2009. VAR-002-1.1b is awaiting regulatory approval. The subsequent interpretations provide clarity regarding the responsibilities of a registered entity and do not change the meaning or language of the original NERC Reliability Standard and its requirements. For consistency in this filing, the original NERC Reliability Standard, VAR-002-1, is used throughout.

<sup>&</sup>lt;sup>6</sup> See 18 C.F.R § 39.7(d)(4).

<sup>&</sup>lt;sup>7</sup> North American Electric Reliability Corporation, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008); North American Electric Reliability Corporation, "Guidance Order on Reliability Notices of Penalty," 129 FERC ¶ 61,069 (2009). See also North American Electric Reliability Corporation, "Notice of No Further Review and Guidance Order," 132 FERC ¶ 61,182 (2010).



Commission-approved Reliability Standards and the underlying facts and circumstances of the violations at issue.

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

- 1. the violations constituted Post Oak's first occurrence of violations of the subject NERC Reliability Standards;
- 2. Texas RE reported that Post Oak was cooperative throughout the compliance enforcement process;
- 3. Post Oak has a compliance program, as discussed in the Disposition Document;<sup>8</sup>
- 4. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
- 5. Texas RE determined that the violations did not pose a serious or substantial risk to the reliability of the bulk power system (BPS), as discussed in the Disposition Document;
- 6. Post Oak and its subcontractors were untrained, uncooperative and unable to respond remotely to the ERCOT ISO's request; and
- 7. Texas RE reported that there were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

For the foregoing reasons, the NERC BOTCC believes that the assessed penalty of one hundred ninety-eight thousand six hundred dollars (\$198,600) is appropriate for the violations and circumstances at issue, and is consistent with NERC's goal to promote and ensure reliability of the BPS.

Pursuant to 18 C.F.R. § 39.7(e), the penalty will be effective upon expiration of the 30 day period following the filing of this NOP with the Commission, or, if the Commission decides to review the penalty, upon final determination by the Commission.

<sup>&</sup>lt;sup>8</sup> The internal compliance program was a neutral factor in the penalty determination.

# Attachments to be included as Part of this Notice of Penalty

The attachments to be included as part of this NOP are the following documents:

- a) Disposition of Violation dated July 12, 2010, included as Attachment a;
- b) Texas RE's Preliminary Notice of Alleged Violation, included as Attachment b;
- c) Post Oak's Response to the Notice of Alleged Violation and Proposed Penalty or Sanction dated February 3, 2010, included as Attachment c;
- d) Post Oak's Mitigation Plan #MIT-08-2404 for IRO-001-1 R8 submitted February 3, 2010, included as Attachment d;
- e) Post Oak's Certification of Mitigation Plan Completion for IRO-001-1 R8 dated February 3, 2010, included as Attachment e;
- f) Post Oak's Mitigation Plan #MIT-08-2405 for VAR-002-1 R2 submitted February 3, 2010, included as Attachment f;
- g) Post Oak's Certification of Mitigation Plan Completion for VAR-002-1 R2 dated February 3, 2010, included as Attachment g; and
- h) Texas RE's Verification of Mitigation Plan Completion for IRO-001-1 R8 and VAR-002-1 R2 dated July 6, 2010, included as Attachment h;

# A Form of Notice Suitable for Publication<sup>9</sup>

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

<sup>&</sup>lt;sup>9</sup> 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:

Gerald W. Cauley*	Rebecca J. Michael*
President and Chief Executive Officer	Assistant General Counsel
David N. Cook*	North American Electric Reliability Corporation
Sr. Vice President and General Counsel	1120 G Street, N.W.
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116-390 Village Boulevard	Washington, DC 20005-3801
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gerry.cauley@nerc.net	
david.cook@nerc.net	Susan Vincent*
	General Counsel
	Texas Reliability Entity
Mary Lou Ideus*	2700 Via Fortuna
Regulatory Compliance Manager	Suite 225
Horizon Wind Energy	Austin, TX 78746
808 Travis St., Suite #700	(512) 583-4900
Houston, TX 77002	(512) 233-2233 – facsimile
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(713)265-0365 – facsimile	
marylou.ideus@horizonwind.com	Rashida Caraway*
	Manager, Compliance Enforcement
J. Brent Hebert*	Texas Reliability Entity
Director of Regulatory Affairs	2700 Via Fortuna
Horizon Wind Energy	Suite 225
808 Travis St., Suite #700	Austin, TX 78746
Houston, TX 77002	(512) 583-4977
(713)265-0300	(512) 233-2233 – facsimile
(713)265-0365 – facsimile	rashida.caraway@texasre.org
brent.hebert@horizonwind.com	
*Persons to be included on the Commission's	
service list are indicated with an asterisk.	
NERC requests waiver of the Commission's	
rules and regulations to permit the inclusion of	
more than two people on the service list.	

### Conclusion

Accordingly, NERC respectfully requests that the Commission accept this NOP as compliant with its rules, regulations and orders.

Respectfully submitted,

Gerald W. Cauley President and Chief Executive Officer David N. Cook Sr. Vice President and General Counsel North American Electric Reliability Corporation 116-390 Village Boulevard Princeton, NJ 08540-5721 (609) 452-8060 (609) 452-9550 – facsimile gerry.cauley@nerc.net david.cook@nerc.net

cc: Post Oak Wind, LLC Texas Reliability Entity

Attachments

<u>/s/ Rebecca J. Michael</u> Rebecca J. Michael Assistant General Counsel North American Electric Reliability Corporation 1120 G Street, N.W. Suite 990 Washington, DC 20005-3801 (202) 393-3998 (202) 393-3955 – facsimile rebecca.michael@nerc.net



# Attachment a

# **Disposition of Violation dated July 12, 2010**

# DISPOSITION OF VIOLATION<sup>1</sup> Dated July 12, 2010

NERC TRACKING	REGIONAL ENTITY TRACKING	NOC#
NO.	NO.	
TRE200800061	ERCOT0809POST0001	NOC-550
TRE200800062	ERCOT0809POST0002	

REGISTERED ENTITY Post Oak Wind, LLC (Post Oak) NERC REGISTRY ID NCR10167

REGIONAL ENTITY **Texas Reliability Entity (Texas RE)**<sup>2</sup>

# I. <u>REGISTRATION INFORMATION</u>

	E	NIII	Y IS RI	EGIS	TERE	D FO	K THE	5 FOL	LOW	ING F	UNC	TIONS:		
BA	DP	GO	GOP	IA	LSE	PA	PSE	RC	RP	RSG	TO	TOP	TP	TSP
		Х	X											
		11/29/07	11/29/07											

ENTITY IS REGISTERED FOR THE FOLLOWING FUNCTIONS:

\* VIOLATION APPLIES TO SHADED FUNCTIONS

#### DESCRIPTION OF THE REGISTERED ENTITY

Post Oak is located in north-central Texas in Shackelford and Callahan Counties, near Abilene, Texas. Post Oak, completed in May 2008, has an installed capacity of 200 MW. Post Oak and Mesquite Wind Farm, LLC, an adjacent wind farm, are collectively known as Lone Star Wind Farm. Lone Star Wind farm is owned and operated by Horizon Wind Energy, LLC (Horizon).

<sup>&</sup>lt;sup>1</sup> For purposes of this document and attachments hereto, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

<sup>&</sup>lt;sup>2</sup> NERC delegated authority to Texas Reliability Entity, Inc. to become the regional entity for the ERCOT region effective July 1, 2010, pursuant to Section 215(e)(4) of the Federal Power Act. NERC also delegated to Texas Reliability Entity, Inc. the authority and responsibility for the continuation of all compliance monitoring and enforcement activities that it had previously delegated to Texas Regional Entity (a division of Electric Reliability Council of Texas, Inc.). The term "Texas RE" is used herein to refer to both Texas Regional Entity and Texas Reliability Entity, Inc.

RELIABILITY	REQUIREMENT(S)	SUB-	VRF(S)	VSL(S)
STANDARD		REQUIREMENT(S)		
IRO-001-1	<b>8</b> <sup>3</sup>		High	Severe

# II. <u>VIOLATION INFORMATION</u>

PURPOSE OF THE RELIABILITY STANDARD AND TEXT OF RELIABILITY STANDARD AND REQUIREMENT(S)/SUB-REQUIREMENT(S)

### The purpose statement of IRO-001-1 provides:

Reliability Coordinators must have the authority, plans, and agreements in place to immediately direct reliability entities within their Reliability Coordinator Areas to re-dispatch generation, reconfigure transmission, or reduce load to mitigate critical conditions to return the system to a reliable state. If a Reliability Coordinator delegates tasks to others, the Reliability Coordinator retains its responsibilities for complying with NERC and regional standards. Standards of conduct are necessary to ensure the Reliability Coordinator does not act in a manner that favors one market participant over another.

# **IRO-001-1 R8 provides:**

**R8.** Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing-Selling Entities shall comply with Reliability Coordinator directives unless such actions would violate safety, equipment, or regulatory or statutory requirements. Under these circumstances, the Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, or Purchasing-Selling Entity shall immediately inform the Reliability Coordinator of the inability to perform the directive so that the Reliability Coordinator may implement alternate remedial actions.

The purpose statement of VAR-002-1 provides: "To ensure generators provide reactive and voltage control necessary to ensure voltage levels, reactive flows, and reactive resources are maintained within applicable Facility Ratings to protect equipment and the reliable operation of the Interconnection."

<sup>&</sup>lt;sup>3</sup> Texas RE also considered that a Post Oak was in violation of TOP-001-1 R3, but determined that both violations stemmed from the same act of non-compliance and therefore Post Oak's possible non-compliance with TOP-001-1 R3 would be mitigated through the mitigation of the instant IRO-001-1 violation.

### VAR-002-1 R2 provides:

**R2.** Unless exempted by the Transmission Operator, each Generator Operator shall maintain the generator voltage or Reactive Power output (within applicable Facility Ratings) as directed by the Transmission Operator.

**R2.1.** When a generator's automatic voltage regulator is out of service, the Generator Operator shall use an alternative method to control the generator voltage and reactive output to meet the voltage or Reactive Power schedule directed by the Transmission Operator.

**R2.2.** When directed to modify voltage, the Generator Operator shall comply or provide an explanation of why the schedule cannot be met.

#### VIOLATION DESCRIPTION

**IRO-001-1 R8:** On May 22, 2008, ERCOT ISO issued a verbal directive to Post Oak to increase VAR production to assist a low voltage situation on the grid. Post Oak did not provide the required assistance, nor did they provide a valid reason for failing to increase VAR output as directed. During the time of the violation, Post Oak had contracted with J Aron & Company (J Aron) as the GOP for its facility, and J Aron had subcontracted the GOP responsibilities to APX, Inc. (APX).

Based on e-mails, operator logs, and recorded telephone conversations between ERCOT ISO and Post Oak/J Aron/APX, Texas RE determined that Post Oak was non-compliant with NERC Reliability Standard IRO-001-1 R8.

Evidence showed that ERCOT ISO operators contacted J Aron at 17:15:21 on May 22, 2008, asking Post Oak to increase VAR output to support voltage. ERCOT ISO tried to explain the term "VAR" to the Post Oak operator, who did not understand the term or how to respond to the directive.

• At 18:24:23 (sixty nine minutes later), ERCOT ISO again contacted J Aron, asking Post Oak to increase the voltage output 10 to 20 VAR into the system.

• At 18:29:14 (five minutes later), ERCOT ISO was contacted by APX requesting a written statement to increase Post Oak generator voltage output by 10 to 20 VAR. An ERCOT ISO operator requested that Post Oak follow their voltage profile, and explained voltage requirements for its facility.

• At 19:18:00 (forty nine minutes later), ERCOT ISO again contacted J Aron asking about the status of its directive. The representative from J Aron notified ERCOT ISO that she would check on the status.

• At 19:23:53 (five minutes later), ERCOT ISO received a call from J Aron, notifying ERCOT ISO that Post Oak would not be able to meet the directive because the switched capacitors were disconnected at the substation and could

not be brought online remotely. ERCOT ISO was told to contact the Plant Manager if needed.

Therefore, Post Oak did not comply with Reliability Coordinator directives, nor did it offer any valid reasoning recognized in the Standard (*i.e.*, "violate safety, equipment, or regulatory or statutory requirements") for failing to comply with the directive.

<u>VAR-002-1 R2</u>: Following the events listed above, ERCOT ISO contacted the Post Oak Plant Manager at 19:27:33. ERCOT ISO once again asked Post Oak if they would be able to help the system by increasing VAR support. The Plant Manager stated that an entity performing delegated tasks for its TOP had requested that Post Oak take its main breaker for the capacitors not in service because of recent high voltage events and therefore it could not be remotely controlled. The Plant Manager also stated that he could not voltage-regulate with the units. The Plant Manager stated that its connecting Transmission Owner does not have reactors to control its own voltage, and they were dropped three times because of the high voltage events. The ERCOT ISO Operator and the Post Oak Plant Manager also discussed the Long Creek bus voltage being 351 kV. The Plant Manager believed that should be sufficient. The ERCOT ISO Operator then told him about the system condition, and the Plant Manager said he would send someone to look at the main breaker for the capacitors.

It took Post Oak 63 minutes to respond to ERCOT's request for increase VAR support. Ultimately, Post Oak did not provide the additional VAR support because its capacitors were not in service and could not remotely regulate the units.

As before, based on e-mails, operator logs, and recorded telephone conversations between ERCOT ISO and Post Oak/J Aron/APX, Texas RE has found Post Oak to be non-compliant with NERC Reliability Standard VAR-002-1 R2.

#### RELIABILITY IMPACT STATEMENT- POTENTIAL AND ACTUAL

Texas RE concluded that these two violations did not pose a serious or substantial risk to the reliability of the bulk power system (BPS) specifically because Post Oak is a wind farm with a combined capacity of 200 MW. The IRO-001-1 violation has a high Violation Risk Factor, a severe Violation Severity Level and involved Real Time Operations. The VAR-002-1 R2 violation has a medium Violation Risk Factor, a severe Violation Severity Level and involved Real Similar violations involving a registered entity with more capacity could have posed a serious or substantial risk to the BPS.

IS THERE A SETTLEMENT AGREEMENT	YES	NO	$\boxtimes$
WITH RESPECT TO THE VIOLATION(S), RE	GISTERED EN	TITY	

NEITHER ADMITS NOR DENIES IT (SETTLEMENT ONLY) YES

 $\square$ 

 $\square$ 

YES

ADMITS TO IT YES DOES NOT CONTEST IT (INCLUDING WITHIN 30 DAYS) YES

WITH RESPECT TO THE ASSESSED PENALTY OR SANCTION, REGISTERED ENTITY

ACCEPTS IT/ DOES NOT CONTEST IT

#### III. DISCOVERY INFORMATION

METHOD OF DISCOVERY

SELF-REPORT SELF-CERTIFICATION COMPLIANCE AUDIT COMPLIANCE VIOLATION INVESTIGATION SPOT CHECK COMPLAINT PERIODIC DATA SUBMITTAL EXCEPTION REPORTING

DURATION DATE(S) May 22, 2008

DATE DISCOVERED BY OR REPORTED TO REGIONAL ENTITY November 3, 2008

IS THE VIOLATION STILL OCCURRING YES  $\square$  NO  $\square$  IF YES, EXPLAIN

REMEDIAL ACTION DIRECTIVE ISSUED	YES	NC	) 🖂
PRE TO POST JUNE 18, 2007 VIOLATION	YES	NC	) 🖂

#### IV. MITIGATION INFORMATION

FOR FINAL ACCEPTED MITIGATION PLAN: MITIGATION PLAN NO. IRO-001-1 R8: MIT-08-2404 VAR-002-1 R2: MIT-08-2405 DATE SUBMITTED TO REGIONAL ENTITY February 3, 2010 DATE ACCEPTED BY REGIONAL ENTITY March 15, 2010 DATE APPROVED BY NERC March 24, 2010 DATE PROVIDED TO FERC March 24, 2010

# IDENTIFY AND EXPLAIN ALL PRIOR VERSIONS THAT WERE ACCEPTED OR REJECTED, IF APPLICABLE

MITIGATION PLAN COMPLETED YES NO

# EXPECTED COMPLETION DATE IRO-001-1 R8: March 31, 2009 EXTENSIONS GRANTED N/A ACTUAL COMPLETION DATE IRO-001-1 R8: March 31, 2009 VAR-002-1 R2: April 22, 2009

DATE OF CERTIFICATION LETTER IRO-001-1 R8: February 3, 2010 VAR-002-1 R2: February 3, 2010

CERTIFIED COMPLETE BY REGISTERED ENTITY AS OF <u>IRO-001-1 R8</u>: March 31, 2009 <u>VAR-002-1 R2</u>: April 22, 2009

DATE OF VERIFICATION LETTER July 6, 2010 VERIFIED COMPLETE BY REGIONAL ENTITY AS OF IRO-001-1 R8: March 31, 2009 VAR-002-1 R2: April 22, 2009

ACTIONS TAKEN TO MITIGATE THE ISSUE AND PREVENT RECURRENCE

**IRO-001-1 R8:** Post Oak worked with Horizon and APX to test remote capacitor bank control as well as responding to ERCOT-issued directives. Post Oak also worked with Horizon and APX to revise (and will continually revise) operating procedures regarding communications, voltage control, real-time dispatch services, and other ERCOT protocols. Furthermore, Horizon has met with APX personnel in order to discuss the event, as well as to discuss compliance with NERC Reliability Standards. Horizon and Post Oak regularly hold these meetings with APX in order to provide constant updates about current issues and provide any necessary training. Additionally, Post Oak has revised its compliance training program in order to place more emphasis on operations and communications.

<u>VAR-002-1 R2</u>: Post Oak has worked with suppliers to rectify Reactive Power regulation issues on its turbine equipment. Post Oak has also upgraded its Reactive Power control systems at its substation facilities; working with a third-party contractor, Post Oak installed remote control capability of its capacitor banks. Post Oak trained both its and APX's personnel in operation of the new system as well as responding to directives issued by ERCOT. As with the previous violation, Horizon, Post Oak and APX conducted training of personnel in order to improve day-to-day operations, communication, and VAR/voltage regulation. Similarly, Post Oak has revised its operating and training procedures to emphasize communications, voltage control, real-time dispatch, and other standard operations.

LIST OF EVIDENCE REVIEWED BY REGIONAL ENTITY TO EVALUATE COMPLETION OF MITIGATION PLAN (FOR CASES IN WHICH MITIGATION IS NOT YET COMPLETED, LIST EVIDENCE REVIEWED FOR COMPLETED MILESTONES)

- 1. Signed Agreement for remote capacitor bank control
- 2. Correspondence regarding installation and testing of remote capacitor bank control
- **3.** Correspondence regarding installation of Reactive Power Control module for turbine equipment
- 4. Training agendas
- 5. Training procedures and presentations regarding voltage support
- 6. Training sign-in sheets
- 7. Travel documentation
- 8. Requirements for real time desk operations' contractors

**IRO-001-1 R8**: Texas RE reviewed items 2 and 8 to confirm that Post Oak installed and trained APX on remote control of the capacitor bank, as well as responding to ERCOT ISO directives. Texas RE also reviewed items 4, 5, 6 and 7 to confirm that Post Oak has met with APX and other operations personnel to revise their operating procedures, to discuss the event, and to discuss compliance with NERC Reliability Standards. Lastly, Texas RE reviewed items 4, 5, 6 and 7 to confirm that Post Oak regularly meets with APX, and that Post Oak has revised its operating/training procedures to ensure APX's proper day-to-day operations. Item 8 was reviewed by Texas RE to verify that Post Oak has revised its requirements for all 24-hour services vendors, such as APX. Post Oak requires service vendors have a 24-hour desk.

<u>VAR-002-1 R2</u>: Texas RE reviewed item 3 to confirm that Post Oak rectified the Reactive Power Control capabilities for low-output/leading power-factor situations. Texas RE reviewed items 1 and 2 to confirm that Post Oak installed and tested remote capacitor bank control systems. Texas RE reviewed items 4, 5, 6, and 7 to ensure that both its and APX's personnel were trained in the operation of the control system as well as responding to ERCOT ISO directives. Texas RE also reviewed items 4, 5, 6 and 7 to confirm that Post Oak regularly meets with APX, and that Post Oak has revised its operating/training procedures to ensure APX's proper day-to-day operations. Item 8 was reviewed by Texas RE to verify that Post Oak has revised its requirements for all 24-hour services vendors, such as APX. Post Oak requires service vendors have the ability to change voltage.

### V. <u>PENALTY INFORMATION</u>

TOTAL ASSESSED PENALTY OR SANCTION OF **\$198,600** FOR **2** VIOLATIONS OF RELIABILITY STANDARDS.

#### (1) REGISTERED ENTITY'S COMPLIANCE HISTORY

PRIOR VIOLATIONS OF ANY OF THE INSTANT RELIABILITY STANDARD(S) OR REQUIREMENT(S) THEREUNDER YES NO

LIST ANY CONFIRMED OR SETTLED VIOLATIONS AND STATUS

# ADDITIONAL COMMENTS

PRIOR VIOLATIONS OF OTHER RELIABILITY STANDARD(S) OR REQUIREMENTS THEREUNDER YES  $\square$  NO  $\bowtie$ 

LIST ANY PRIOR CONFIRMED OR SETTLED VIOLATIONS AND STATUS

ADDITIONAL COMMENTS

(2) THE DEGREE AND QUALITY OF COOPERATION BY THE REGISTERED ENTITY (IF THE RESPONSE TO FULL COOPERATION IS "NO," THE ABBREVIATED NOP FORM MAY NOT BE USED.)

FULL COOPERATIONYESNOIF NO, EXPLAIN

(3) THE PRESENCE AND QUALITY OF THE REGISTERED ENTITY'S COMPLIANCE PROGRAM

# IS THERE A DOCUMENTED COMPLIANCE PROGRAM<sup>4</sup> YES NO EXPLAIN

The parent company, Horizon Wind Energy, LLC, has a Chief Regulatory Compliance Officer and a Regulatory Oversight Committee. The Regulatory Oversight Committee is made up of senior management or their designee. The Chief Regulatory Compliance Officer reports directly to the CEO of Horizon. Training of NERC Standards is conducted by the members of the Regulatory Oversight Committee. Horizon also provides a compliance program manual and training to employees. Horizon's compliance program applies to all wind farms owned by Horizon. Post Oak Wind is part of Horizon's regulatory compliance program. EXPLAIN SENIOR MANAGEMENT'S ROLE AND INVOLVEMENT WITH RESPECT TO THE REGISTERED ENTITY'S COMPLIANCE PROGRAM, INCLUDING WHETHER SENIOR MANAGEMENT TAKES ACTIONS THAT SUPPORT THE COMPLIANCE PROCEDAM

TAKES ACTIONS THAT SUPPORT THE COMPLIANCE PROGRAM, SUCH AS TRAINING, COMPLIANCE AS A FACTOR IN EMPLOYEE EVALUATIONS, OR OTHERWISE.

See above.

(4) ANY ATTEMPT BY THE REGISTERED ENTITY TO CONCEAL THE VIOLATION(S) OR INFORMATION NEEDED TO REVIEW, EVALUATE OR INVESTIGATE THE VIOLATION.

YES NO IF YES, EXPLAIN

(5) ANY EVIDENCE THE VIOLATION(S) WERE INTENTIONAL (IF THE RESPONSE IS "YES," THE ABBREVIATED NOP FORM MAY NOT BE USED.)

YES NO IF YES, EXPLAIN

# (6) ANY OTHER MITIGATING FACTORS FOR CONSIDERATION

YES NO IF YES, EXPLAIN

<sup>&</sup>lt;sup>4</sup> The internal compliance program was a neutral factor in the penalty determination.

### (7) ANY OTHER AGGRAVATING FACTORS FOR CONSIDERATION

YES	$\boxtimes$	NO	
IF YE	S, EXI	PLAIN	

#### IRO-001-1 R8:

Post Oak, as a GOP, was untrained and uncooperative with the ERCOT ISO's Real Time directive.

The ERCOT ISO operator had to explain the term "VAR" to the Post Oak LLC Operator, who did not understand the term or how to respond to the directive. The ERCOT ISO had to contact J Aron and APX multiple times and APX responded with a request that the Real Time directive be put in writing. Post Oak and its subcontractors were unaware of its requirements under the Standard to comply with directive unless it was able to do so because its actions to comply would violate safety, equipment, or regulatory or statutory requirements.

### VAR-002-1 R2:

Post Oak was uncooperative and unable to respond remotely to the ERCOT ISO's Real Time directive to provide VAR support. Post Oak did not notify ERCOT ISO of its inability to respond remotely until an hour after the request.

### (8) ANY OTHER EXTENUATING CIRCUMSTANCES

YES NO IF YES, EXPLAIN

# EXHIBITS (SEE ATTACHMENTS TO THE NOTICE OF PENALTY):

SOURCE DOCUMENT Texas RE's Preliminary Notice of Alleged Violation for IRO-001-1 R8 and VAR-002-1 R2 dated November 3, 2008

MITIGATION PLAN Post Oak's Mitigation Plan #MIT-08-2404 for IRO-001-1 R8 submitted February 3, 2010 Post Oak's Mitigation Plan #MIT-08-2405 for VAR-002-1 R2 submitted February 3, 2010

CERTIFICATION BY REGISTERED ENTITY Post Oak's Certification of Mitigation Plan Completion for IRO-001-1 R8 dated February 3, 2010 Post Oak's Certification of Mitigation Plan Completion for VAR-002-1 R2 dated February 3, 2010 OTHER RELEVANT INFORMATION:

NOTICE OF ALLEGED VIOLATION AND PROPOSED PENALTY OR SANCTION ISSUED DATE: December 3, 2009 OR N/A

SETTLEMENT DISCUSSIONS COMMENCED DATE: OR N/A  $\boxtimes$ 

NOTICE OF CONFIRMED VIOLATION ISSUED DATE: May 4, 2010 OR N/A

SUPPLEMENTAL RECORD INFORMATION DATE(S) OR N/A

REGISTERED ENTITY RESPONSE CONTESTED FINDINGS PENALTY BOTH NO CONTEST

HEARING REQUESTED YES NO DATE OUTCOME APPEAL REQUESTED



# Attachment b

# Preliminary Notice of Alleged Violation dated November 3, 2008



# CONFIDENTIAL

# **Preliminary Notice of Alleged Violation**

Date: November 3, 2008

Issued To: Post Oak Wind, LLC Brian Hayes Director of Asset Management

Notification Number(s): TRE2008000061 Regional Entity Reference Number: NCR10167

# Alleged Violation(s) of Requirement(s) of Reliability Standards Approved by the Applicable Governmental Authority

Reliability standard(s) allegedly viola	ated:	IRO-001-1
Requirement(s) allegedly violated:	R8	

Reliability standard(s) allegedly violated: VAR-002-1

Requirement(s) allegedly violated: R2

Discovery method of alleged violation: Spot Check

Date and time the alleged violation occurred or was discovered: May 22, 2008 18:20 – 19:30

Evidence of alleged violation:

Post Oak Wind, LLC is hereby notified that Texas Regional Entity (Texas RE) alleges that on May 22, 2008 Post Oak Wind, LLC, which at the time was registered as a Generator Operator (GOP) under the NERC Compliance Registry, did not comply or was not in compliance with the above requirement(s) of the NERC Reliability Standards.

On May 22, 2008, in an effort to give a directive for Post Oak Wind to increase VAR production to assist a low voltage situation on the grid, ERCOT (ISO) received no assistance or definite answer as to whether or not support would be provided within a reasonable amount of time. Post Oak Wind, LLC took 63 minutes to respond.

This letter serves as official notice to preserve all documentation pertaining to the violation. Documentation includes, but is not limited to — operator logs, recorded voice communications, e-mail and written correspondence, work orders, inspection records, patrol records, budget information, and any other documents that may be directly or indirectly related to the alleged violation(s).



Texas RE will notify you of its conclusions at the completion of review of the potential alleged violation. After review, Texas RE may conclude that there is insufficient basis to pursue the matter further at this time or may conclude sufficient basis does exist to pursue the matter further with a Notice of Alleged Violation and Proposed Penalty or Sanction (NAVPS) that sets forth Texas RE's conclusions and your response options.

Texas RE appreciates your cooperation in advance and looks forward to resolving this matter in the interests of promoting the reliability of the Bulk-Power System. If you have not already done so, Texas RE encourages you to review the circumstances of the subject issue(s) and submit mitigation plan(s) within 30 days of this notice. Mitigation plan forms and instructions are available at the following address:

http://www.ercot.com/mktrules/compliance/tre/enforcement/form/Mitigation%20Plan%20Version %2001\_07.doc.

Please note that mitigation plan submittal does not constitute an admission a violation has occurred nor does it waive your right to contest a NAVPS, if and when it is delivered.

Settlement negotiations may occur at any time after this notice and prior to the issuance of a notice of Alleged Violation and Proposed Penalty or Sanction and until such time a Notice of Penalty is filed with the Federal Energy Regulatory Commission ("Commission") or Applicable Governmental Authority by NERC.

As required by the NERC Rules of Procedure and NERC Compliance Monitoring and Enforcement Program, the information in this notice will be provided on a non-public basis to the Commission or Applicable Governmental Authority. The information regarding the possible noncompliance(s) or violation(s) will not be made public unless and until a violation is confirmed.

Please include the Texas RE tracking numbers indicated above in any correspondence to Texas RE regarding this matter. If you have any questions, please feel free to contact Jeff Whitmer at (512) 225-7030 or via e-mail at <u>Jeff.whitmer@TexasRE.org</u>.

Respectfully submitted,

Jeff Whitmer Manager, Compliance Enforcement Texas Regional Entity (512) 225-7030 Email: <u>Jeff.Whitmer@TexasRE.org</u>

cc: Larry Grimm, Texas Regional Entity



Victor Barry, Texas Regional Entity David Bueche, Texas Regional Entity



# Attachment A

Date or Period of Alleged Violation	Registered Entity	Reliability Standard(s)	Requirement(s)	Method or Source of Alleged Violation
05/22/2008	Post Oak Wind, LLC	IRO-001-1	R8	Spot Check
05/22/2008	Post Oak Wind, LLC	VAR-002-1	R2	Spot Check

**Standard IRO-001-1, R8** specifies each Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing-Selling Entities shall comply with Reliability Coordinator directives unless such actions would violate safety, equipment, or regulatory or statutory requirements. Under these circumstances, the Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, or Purchasing-Selling Entity shall immediately inform the Reliability Coordinator of the inability to perform the directive so that the Reliability Coordinator may implement alternate remedial actions.

**Standard VAR-002-1, R2** specifies unless exempted by the Transmission Operator, each Generator Operator shall maintain the generator voltage or Reactive Power output (within applicable Facility Ratings1) as directed by the Transmission Operator.

**R2.2.** When directed to modify voltage, the Generator Operator shall comply or provide an explanation of why the schedule cannot be met.

For Public Release - Ù^] c^{ à^¦Á+€, 2010



# Attachment c

# Post Oak's Response to the Notice of Alleged Violation and Proposed Penalty or Sanction dated February 3, 2010



February 3, 2010

Victor Barry Director, Compliance Texas Regional Entity 2700 Via Fortuna Drive, Suite 225 Austin, Texas 78746

### Re: Notice of Alleged Violation and Proposed Penalty or Sanction, Numbers TRE200800061-TRE200800062 – Notice of Election

Dear Mr. Barry:

Pursuant to the December 3, 2009 Notice of Alleged Violation and Proposed Penalty or Sanction issued by the Texas Regional Entity, Post Oak Wind, LLC ("Post Oak") hereby submits its election of Option #1 contained therein that: "Post Oak Wind, LLC agrees with or does not contest the Alleged Violation and proposed penalty, and agrees to submit and implement a Mitigation Plan to correct the violation and its underlying causes."

Post Oak concurrently submits mitigation plans for both alleged violations TRE200800061 and TRE200800062. Post Oak and its parent company, Horizon Wind Energy LLC ("Horizon"), are dedicated to business conduct that promotes integrity and compliance with all applicable laws, regulations, and requirements. Consistent with our culture of compliance, and as detailed in the mitigation plans, Horizon and Post Oak proactively engaged in remedial measures (including equipment upgrades and extensive training) to address concerns arising from communications failures between Post Oak and its third-party Qualified Scheduling Entity (QSE), and the entity to which its third-party QSE had subcontracted QSE responsibilities, on May 22, 2008. In point of fact, the companies had undertaken a number of initiatives prior to the Texas Regional Entity initiating its spot check of Post Oak on September 11, 2008. It is our belief that Post Oak has complied with the reliability standards at issue since the May 22, 2008 event.

Should you have any questions regarding Post Oak's response or mitigation plan, please contact the following authorized representative:

Brian Hayes Director of Asset Management brian.hayes@horizonwind.com (713) 265-0245

Sincerely,

Antonio Coutinho Chief Energy Management Officer



# Attachment d

# Post Oak's Mitigation Plan #MIT-08-2404 for IRO-001-1 R8 submitted February 3, 2010



# Confidential Mitigation Plan Submittal for Post Oak Wind, LLC

Date this Mitigation Plan is being submitted: 2/3/2010

If this Mitigation Plan has already been completed:

- Check this box <u>X</u> and
- Provide the Date of Completion of the Mitigation Plan: <u>March 31, 2009 (except for</u> <u>certain actions on-going that will continue through the duration of Post Oak's business</u> <u>arrangement with APX as Qualifying Scheduling Entity).</u>

# Section A: <u>Compliance Notices</u>

- Section 6.2 of the CMEP<sup>1</sup> 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. This person may be the Registered Entity's point of contact described in Section 2.0.
  - (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) 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.

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<sup>&</sup>lt;sup>1</sup> "Uniform Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation;" a copy of the current version approved by the Federal Energy Regulatory Commission is posted on NERC's website.



- This submittal form may be used to provide a required Mitigation Plan for review and approval by Texas Regional Entity (Texas RE) and NERC.
- The Mitigation Plan shall be submitted to the Texas RE and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
- This Mitigation Plan form may be used to address one or more related violations of one Reliability Standard. A separate mitigation plan is required to address violations with respect to each additional Reliability Standard, as applicable.
- If the Mitigation Plan is approved by Texas RE and 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.
- Texas RE or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
- Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

# Section B: <u>Registered Entity Information</u>

B.1 Identify your organization: Post Oak Wind, LLC ("Post Oak")

Company Name:	Post	t Oak V	Vind	I, LLC				
Company Address:	808	Travis	St.,	Suite	700,	Houston,	Texas	77002
NERC Compliance	Regis	stry ID	[if k	nown	<b>]</b> :	<u>10167</u>	7	

B.2 Identify the individual in your organization who will serve as the Contact to Texas RE regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Texas RE regarding this Mitigation Plan.

Name:	<u>Brian Hayes</u>
Title:	Director of Asset Management
Email:	brian.hayes@horizonwind.com
Phone:	(713) 265-0245

# Section C: <u>Identity of Reliability Standard Violations Associated with this</u> <u>Mitigation Plan</u>

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

C.1 Standard: <u>IRO-001-1</u> [*Identify by Standard Acronym* (e.g. FAC-001-1)]



# C.2 Requirement(s) violated and violation dates: [Enter information in the following Table]

NERC Violation ID # [if known]	Texas RE Violation ID # [if known ]	Requirement Violated (e.g. R3.2)	Violation Date <sup>(*)</sup>
aaaaaYYYYnnnnn	TREYYYYnnnnn	Rn.n.n	MM/DD/YY
TRE200800061	TRE200800061	R8	05/22/2008

(\*) Note: The Violation Date shall be: (i) the violation occurred; (ii) the date that the violation was selfreported; or (iii) the date that the violation has been deemed to have occurred on by Texas RE. Questions regarding the date to use should be directed to the Texas RE.

C.3 Identify the cause of the violation(s) identified above:

ERCOT issued a verbal directive to Post Oak to increase VAR production to assist with a low voltage situation on the grid. As required by ERCOT Protocols and Guides, ERCOT contacted Post Oak's Qualified Scheduling Entity (QSE), J Aron & Company, which had sub-contracted its QSE responsibility to APX, Inc. The APX 24/7 operations personnel were not properly trained and did not understand the technical language of the directive issued to Post Oak by the ERCOT ISO. As a result, the APX personnel provided incorrect information regarding the ERCOT directive to Post Oak operations personnel.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

C.4 **[Optional]** Provide any relevant additional information regarding the violations associated with this Mitigation Plan:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

# 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 violations identified above in Part C.2 of this form:



In response to the May 22, 2008 event, Post Oak evaluated its communication procedures and training.

Horizon immediately counseled Post Oak operations personnel and APX personnel on proper notification procedures. Horizon and Post Oak also worked in tandem with J Aron to identify gaps in APX training and began to revise APX's procedures for communication with the ERCOT ISO on behalf of Post Oak. Horizon, Post Oak and J Aron initiated meetings with APX personnel to review training given to APX's 24/7 personnel, as well as to discuss plant operations and nodal compliance. Formal retraining of Post Oak operations personnel and APX personnel on compliance with NERC Reliability Standards was completed in September 2008. Due to the occurrence of this event, compliance training was restructured to place more emphasis on day-today operations and communications.

In addition, Horizon revised its requirements for all 24-hour service providers and worked with APX from September 2008 through March 2009 to improve APX's standard operating procedures for hardware and software, including procedures for communications with Post Oak, voltage control, and real-time dispatch services. Moreover, Horizon and Post Oak reviewed APX personnel procedures, including communications procedures, for accuracy of information and sufficiency of processes. To date, Post Oak and Horizon personnel have invested an estimated 150 hours in the training of APX personnel on the details of Post Oak's interaction with the ERCOT ISO. Meetings and training with APX have focused on understanding ISO protocols and guidelines, current issues and events at the wind farm facility, and any new or changed procedures at the facility.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

# Check this box X and proceed to Section E of this form if this Mitigation Plan, as set forth in Part D.1, has already been completed; otherwise respond to Part D.2, D.3 and, optionally, Part D.4, below.

#### Mitigation Plan Timeline and Milestones

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Immediately following the May 22, 2008 event, Post Oak proactively undertook measures to improve its communications protocols related to its interaction with the ERCOT ISO. In addition, Post Oak's QSE, J Aron, and its subcontractor, APX, immediately began corrective actions to identify gaps in their communications protocols. Horizon and Post Oak also worked with APX through March 2009 to improve its standard operating procedures and other protocols for hardware, software, and personnel communications with Post Oak and the ERCOT ISO. In 2009, Post Oak



initiated bi-weekly meetings to review all actions taken by its personnel as well as thirdparty personnel. These meetings will continue for the duration of Post Oak's business arrangement with APX. Additional details are provided in the table below in response to D.3.

Post Oak asserts that these proactive measures appropriately constitute Post Oak's mitigation plan. These measures have all been completed, and Post Oak believes it has completed all actions necessary to maintain compliance with NERC Reliability Standard IRO-001-1.

D.3 Enter Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Proposed Completion Date* (shall not be more than 3 months apart)
Post Oak operations and APX personnel set up and tested the remote capacitor bank control from the APX control center. The system was set up successfully, and Post Oak operations, with assistance from Horizon technical support, conducted a test operation of a capacitor bank for operator familiarization and system verification, which was also successful. The test also included training on various sample types of orders that the ERCOT ISO may send to Post Oak through APX, as well as the required responses.	Completed June 20, 2008
On June 20, 2008, APX became responsible for real-time response to the ERCOT ISO for matters related to the operation of the capacitor banks. Post Oak instructed APX to escalate any issues that may arise by using the existing Post Oak call tree.	
Horizon delivered to APX revised requirements applicable to all of Horizon's 24-hour service vendors.	September 15, 2008
Post Oak and APX successfully tested remote control capability and communications links between their facilities.	September 2008
Horizon worked with APX to improve APX's standard operating procedures for hardware and software, including procedures for communications with Post Oak, voltage control, and real-time dispatch services.	October 2008 – March 2009
Horizon personnel met with APX personnel in an all-	Completed January 7, 2009



day meeting at APX's offices to observe the APX operations center, and to discuss issues related to the May 22, 2008 event. The discussion also focused on compliance with applicable NERC Reliability Standards.	
Horizon and Post Oak personnel commenced regular meetings with APX personnel to discuss events of the past two weeks, current issues, and conduct any necessary re-training. These meeting were held weekly during January 2009, but since February 2009 have been held bi-weekly. Meetings will continue for the duration of Post Oak's business arrangement with APX.	January 15, 2009 through present
Post Oak personnel continued to review and update its existing procedures for use by APX in its interaction with ERCOT ISO on behalf of Post Oak. Post Oak personnel focused on APX's understanding of the ERCOT ISO's Protocols and Guides as they relate to Post Oak. APX operators were tested and re-trained as required.	February 2, 2009 through March 31, 2009
The new training program requires that APX operators attend eight (8) weeks of intensive training on the general workings of the electric grid and the ERCOT ISO's Protocols and Guides as they relate to Post Oak.	

(\*) Note: 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.

[Note: Provide your response here; additional detailed information may be provided as an attachment as necessary]

# Additional Relevant Information (Optional)

D.4 If you have any relevant additional information that you wish to include regarding the mitigation plan, milestones, milestones dates and completion date proposed above you may include it here:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]



# Section E: Interim and Future Reliability Risk

# Check this box X and proceed and respond to Part E.2 and E.3, below, if this Mitigation Plan, as set forth in Part D.1, has already been completed.

# Abatement of Interim BPS Reliability Risk

E.1 While your organization is implementing the Mitigation Plan proposed in Part D of this form, the reliability of the Bulk Power System 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 or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

Implementation of the mitigation plan involved training, enhancement of communications procedures, and periodic equipment testing, none of which posed a significant risk to Bulk Power System ("BPS") reliability. Post Oak has completed all necessary actions under the mitigation plan and does not know of, or anticipate, any further risk to BPS reliability.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

# Prevention of Future BPS Reliability Risk

E.2 Describe how successful completion of the Mitigation Plan as laid out in Part D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Personnel training in proper notification procedures, operational procedures, and theoretical knowledge of VAR Control and Voltage Regulation provides the necessary knowledge that is a prerequisite to reliable operations for the site, as the overall reliability of the BPS. Regular evaluation and discussion between Post Oak and APX of operational matters at Post Oak reduces the potential for confusion or communication lapses. Periodic testing of communications equipment verifies that equipment operates as intended or identifies matters that need to be addressed promptly so as to avoid the occurrence of an event and to have increased awareness of the types of situations that may occur.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Part D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Part C.2, or of other reliability standards. If so, identify and describe any such action, including milestones and completion



# dates:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]



# Section F: Authorization

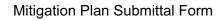
An authorized individual must sign and date this Mitigation Plan Submittal Form. By doing so, this individual, on behalf of your organization:

- Submits the Mitigation Plan, as laid out in Section D of this form, to Texas RE for acceptance by Texas RE and approval by NERC, and
- b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- c) Acknowledges:
  - 1. I am Director of Asset Management of Horizon Wind Energy LLC, the parent company of Post Oak Wind, LLC.
  - 2. I am qualified to sign this Mitigation Plan on behalf of Post Oak Wind, LLC.
  - 3. I have read and understand Post Oak Wind, LLC's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure, including Appendix 4(C) (Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation (NERC CMEP)).
  - 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
  - Post Oak Wind, LLC agrees to be bound by, and comply with, the Mitigation Plan, including the timetable completion date, as approved by Texas RE and approved by NERC.

#### Authorized Individual Signature

(Electronic signatures are acceptable; see CMEP)

Name (Print): Brian Hayes Title: Director of Asset Management Date: February 3, 2010





# Section G: <u>Comments and Additional Information</u>

You may use this area to provide comments or any additional relevant information not previously addressed in this form.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

# Submit completed and signed forms to mitigation@texasre.org

Please direct any questions regarding completion of this form to:

Texas Regional Entity Rashida Caraway 512-225-7056 rashida.caraway@texasre.org



## Attachment e

# Post Oak's Certification of Mitigation Plan Completion for IRO-001-1 R8 dated February 3, 2010



## **Mitigation Plan Completion Certification**

Submittal of a Mitigation Plan Completion Certification shall include data or information sufficient for Texas Regional Entity to verify completion of the Mitigation Plan. Texas Regional Entity 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: Post Oak Wind, LLC

NERC Registry ID: 10167

Date of Submittal of Certification: February 3, 2010

NERC Violation ID No(s): TRE200800061

Reliability Standard and the Requirement(s) of which a violation was mitigated: IRO-001-1 R.8

Date Mitigation Plan was scheduled to be completed per accepted Mitigation Plan:

Date Mitigation Plan was actually completed: March 31, 2009 (except for certain actions ongoing that will continue through the duration of Post Oak's business arrangement with APX.) Additional Comments (or List of Documents Attached):

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: Brian Hayes

Title: Director of Asset Management

Email: brian.hayes@horizonwind.com

Phone: (713) 265-0245

2700 Via Fortuna, Suite 225

Austin, Texas 78746

Tel: (512) 225-7000

Fax: (512) 225-7165

TEXAS REGIONAL ENTITY At Tably and Articles of 197:01		
Authorized Signature $\underline{B}_{-} \omega \cdot \underline{A}_{-}$	Date 2/5/2010	June .

Please submit completed forms or any questions regarding completion of this form to the mitigation@texasre.org.

Please indicate the company name and reference the NERC Violation ID # (if known) in the subject line of the e-mail.



# Attachment f

# Post Oak's Mitigation Plan #MIT-08-2405 for VAR-002-1 R2 submitted February 3, 2010



## Confidential Mitigation Plan Submittal for Post Oak Wind, LLC

Date this Mitigation Plan is being submitted: February 3, 2010

If this Mitigation Plan has already been completed:

- Check this box <u>X</u> and
- Provide the Date of Completion of the Mitigation Plan: <u>April 22, 2009 (except for certain actions ongoing that will continue through the duration of Post Oak's business arrangement with APX as Qualifying Scheduling Entity).</u>

## Section A: Compliance Notices

- Section 6.2 of the CMEP<sup>1</sup> 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. This person may be the Registered Entity's point of contact described in Section 2.0.
  - (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) 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.
- This submittal form may be used to provide a required Mitigation Plan for review and approval by Texas Regional Entity (Texas RE) and NERC.

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<sup>&</sup>lt;sup>1</sup> "Uniform Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation;" a copy of the current version approved by the Federal Energy Regulatory Commission is posted on NERC's website.



- The Mitigation Plan shall be submitted to the Texas RE and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
- This Mitigation Plan form may be used to address one or more related violations of one Reliability Standard. A separate mitigation plan is required to address violations with respect to each additional Reliability Standard, as applicable.
- If the Mitigation Plan is approved by Texas RE and 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.
- Texas RE or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
- Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

## Section B: <u>Registered Entity Information</u>

B.1 Identify your organization: <u>Post Oak Wind, LLC ("Post Oak")</u>

Company Name:	Post Oak Wind, LLC		
Company Address:	808 Travis St., Suite 700,	Houston, TX	77002
NERC Compliance	Registry ID <b>[if known]</b> :	<u>10167</u>	

B.2 Identify the individual in your organization who will serve as the Contact to Texas RE regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Texas RE regarding this Mitigation Plan.

Name:	Brian Hayes
Title:	Director of Asset Management
Email:	brian.hayes@horizonwind.com
Phone:	(713) 265-0245

## Section C: <u>Identity of Reliability Standard Violations Associated with this</u> <u>Mitigation Plan</u>

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

C.1 Standard: <u>VAR-002-1</u> [*Identify by Standard Acronym (e.g. FAC-001-1)*]



### C.2 Requirement(s) violated and violation dates: [Enter information in the following Table]

NERC Violation ID # [if known]	Texas RE Violation ID #	Requirement Violated	Violation Date <sup>(*)</sup>
	[if known ]	(e.g. R3.2)	
aaaaaYYYYnnnnn	TREYYYYnnnnn	Rn.n.n	MM/DD/YY
TRE200800062	TRE200800062	R2	05/22/2008

(\*) Note: The Violation Date shall be: (i) the violation occurred; (ii) the date that the violation was selfreported; or (iii) the date that the violation has been deemed to have occurred on by Texas RE. Questions regarding the date to use should be directed to the Texas RE.

C.3 Identify the cause of the violation(s) identified above:

ERCOT issued a verbal directive to Post Oak to increase VAR production to assist with a low voltage situation on the grid. As required by ERCOT Protocols and Guides, ERCOT contacted Post Oak's Qualified Scheduling Entity (QSE), J Aron & Company, which had sub-contracted its QSE responsibility to APX, Inc. The APX 24/7 operations personnel were not properly trained and did not understand the technical language of the directive issued to Post Oak by the ERCOT ISO. As a result, the APX personnel provided incorrect information regarding the directive to Post Oak operations personnel. In addition, Post Oak personnel could not remotely control voltage at the facility at that time.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

C.4 **[Optional]** Provide any relevant additional information regarding the violations associated with this Mitigation Plan:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

## 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 violations identified above in Part C.2 of this form:

In response to the May 22, 2008 event, Post Oak evaluated three specific areas related to its voltage control operations:

1) Reactive power control at the turbines;

- 2) Reactive power control at the substation; and
- 3) Communication procedures and training.

1) Reactive Power Control at the Turbines: Post Oak identified that the reactive power control module, included as standard equipment on the Gamesa turbines at the wind farm, performs erratically in low output situations when the facility must perform at a leading power factor level. Post Oak worked with Gamesa's senior management to rectify the power regulation issue, which required Gamesa to upgrade the SCADA Reactive Power Module. Gamesa completed the upgrade on October 8, 2008.

2) Reactive Power Control at the Substation: Post Oak engaged a qualified thirdparty contractor to upgrade the substation Human Machine Interface (HMI) to enable remote control of the capacitor banks. Work began on the HMI project on June 3, 2008. The controls system modification was completed on June 13, 2008. Third-party testing was completed on June 18, 2008. APX access to, as well as training on, the HMI began on June 18, 2008. APX operations and Post Oak personnel completed testing the remote capacitor bank control from the APX control center on June 20, 2008. The test also included training on various example orders that ERCOT ISO may send to Post Oak through APX, as well as the required response.

On June 20, 2008, APX became responsible for real time response to the ERCOT ISO for matters related to operation of the capacitor banks, which is now being conducted remotely. Post Oak instructed APX to escalate any issues that may arise by using the existing Post Oak call tree.

3) Communications Procedures and Training: Horizon immediately counseled Post Oak operations personnel and APX personnel on proper notification procedures. Formal re-training of Post Oak operations personnel and APX personnel on compliance with NERC Reliability Standards was completed in September 2008. Due to the occurrence of this event, compliance training was restructured to place more emphasis on day-to-day operations and communications. Horizon conducted refresher VAR and Voltage Regulation training with APX operators on April 22, 2009.

In addition, Horizon revised its requirements for all 24-hour service providers and worked with APX from September 2008 through March 2009 to improve APX's standard operating procedures for hardware and software, including procedures for communications with Post Oak, voltage control, and real-time dispatch services.



Moreover, Horizon and Post Oak reviewed APX personnel procedures, including communications procedures, for accuracy of information and sufficiency of processes.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

Check this box <u>X</u> and proceed to Section E of this form if this Mitigation Plan, as set forth in Part D.1, has already been completed; otherwise respond to Part D.2, D.3 and, optionally, Part D.4, below.

### Mitigation Plan Timeline and Milestones

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Immediately following the May 22, 2008 event, Post Oak proactively undertook measures in order to ensure continued reliability of the ERCOT grid system. Equipment upgrades, including the installation of remote control capability equipment was completed in June 2008. Extensive training and re-training of Post Oak and APX personnel began in June 2008 and continued through April 2009. In order to monitor compliance on a continuous basis, Post Oak initiated bi-weekly meetings to review all actions taken by both its personnel and third-party personnel. Those meetings are ongoing and will continue for the duration of Post Oak's business arrangement with APX. Additional details are provided in the table below in response to D.3.

Post Oak asserts that these proactive measures appropriately constitute Post Oak's mitigation plan. These measures have all been completed, and Post Oak believes it has completed all actions necessary to maintain compliance with NERC Reliability Standard VAR-002-1.

D.3 Enter Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Proposed Completion Date* (shall not be more than 3 months apart)
Horizon and Post Oak operations personnel and technical support engaged a third-party engineering company to install remote capacitor bank control at the Post Oak facility (HMI).	Completed June 3, 2008
HMI installation (control systems modification)	Completed June 13, 2008



completed by the third party engineering company	
completed by the third-party engineering company.	
HMI testing completed by the third-party engineering company. Access and training of APX (sub-contractor 24/7 operations center) began.	Completed June 18, 2008
Post Oak operations and APX personnel set up and tested the remote capacitor bank control from the APX control center. The system was set up successfully, and Post Oak operations, with assistance from Horizon technical support, conducted a test operation of a capacitor bank for operator familiarization and system verification, which was also successful. The test also included training on various sample orders that the ERCOT ISO might be anticipated to send to Post Oak through APX, as well as the required response.	Completed June 20, 2008
On June 20, 2008, APX became responsible for real time response to ERCOT ISO for matters related to operation of capacitor banks. Post Oak instructed APX to escalate any issues that may arise by using the existing Post Oak call tree.	
Horizon personnel provided additional training to Post Oak operations personnel on HMI.	Completed June 26, 2008
Horizon delivered to APX revised requirements applicable to all of Horizon's 24-hour service vendors.	September 15, 2008
Horizon personnel re-trained Post Oak operations personnel on compliance with applicable NERC Reliability Standards at the Post Oak facility.	Completed September 28, 2008
Horizon personnel re-trained APX operations personnel on compliance with applicable NERC Reliability Standards at the Post Oak facility.	Completed September 2008
Gamesa completed the SCADA Reactive Power Module upgrade.	Completed October 8, 2008
Horizon worked with APX to improve APX's standard operating procedures, including procedures for communications with Post Oak, voltage control, and real-time dispatch services.	October 2008 – March 2009



Horizon personnel met with APX personnel in an all- day meeting at APX's offices to observe the APX operations center and to discuss issues related to the May 22, 2008 event. The discussion also focused on compliance with applicable NERC Reliability Standards.	Completed January 7, 2009
Horizon and Post Oak personnel commenced regular meetings with APX personnel to discuss events of the prior two weeks, current issues, and conduct any necessary re-training. These meeting were held weekly during January 2009, but since February 2009 have been held bi-weekly. Meetings will continue for the duration of Post Oak's business arrangement with APX.	January 15, 2009 through present
Horizon conducted refresher VAR and Voltage Regulation training with APX operators.	April 22, 2009
Horizon technical support will conduct further training to APX as necessary in the future.	Timing to be determined as needed

(\*) Note: 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.

[Note: Provide your response here; additional detailed information may be provided as an attachment as necessary]

### Additional Relevant Information (Optional)

D.4 If you have any relevant additional information that you wish to include regarding the mitigation plan, milestones, milestones dates and completion date proposed above you may include it here:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]



## Section E: Interim and Future Reliability Risk

# Check this box $\underline{X}$ and proceed and respond to Part E.2 and E.3, below, if this Mitigation Plan, as set forth in Part D.1, has already been completed.

### Abatement of Interim BPS Reliability Risk

E.1 While your organization is implementing the Mitigation Plan proposed in Part D of this form, the reliability of the Bulk Power System 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 or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

Post Oak has completed all necessary actions under its proposed mitigation plan and does not know of or anticipate any additional risk associated with the implementation of its mitigation plan.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

### Prevention of Future BPS Reliability Risk

E.2 Describe how successful completion of the Mitigation Plan as laid out in Part D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Enhancing remote control capabilities enables Post Oak operations personnel, and its third-party 24/7 control center personnel, to more timely respond to directives for voltage support that may be issued by the ERCOT ISO. Upgrades to the SCADA Reactive Power Module improves system reliability at low production levels (<25MW). Personnel training in proper notification procedures, operational procedures, and theoretical knowledge of VAR Control and Voltage Regulation provides the necessary prerequisite knowledge for reliable operations of the site as it relates to the overall reliability of the Bulk Electric System. Regular bi-weekly meetings will continue to be held to address issues that may arrive or changes to requirements, and conduct training if needed.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Part D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Part



C.2, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]



## Section F: <u>Authorization</u>

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

- Submits the Mitigation Plan, as laid out in Section D of this form, to Texas RE for acceptance by Texas RE and approval by NERC, and
- b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- c) Acknowledges:
  - 1. I am Director of Asset Management of Horizon Wind Energy LLC, the parent company of Post Oak Wind, LLC.
  - 2. I am qualified to sign this Mitigation Plan on behalf of Post Oak Wind, LLC.
  - 3. I have read and understand Post Oak Wind, LLC's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure, including Appendix 4(C) (Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation (NERC CMEP)).
  - 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
  - Post Oak Wind, LLC agrees to be bound by, and comply with, the Mitigation Plan, including the timetable completion date, as approved by Texas RE and approved by NERC.

## Authorized Individual Signature

(Electronic signatures are acceptable; see CMEP)

Name (Print): Brian Hayes Title: Director of Asset Management Date: February 3, 2010

Jupo



Mitigation Plan Submittal Form

## Section G: Comments and Additional Information

You may use this area to provide comments or any additional relevant information not previously addressed in this form.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

Submit completed and signed forms to mitigation@texasre.org

Please direct any questions regarding completion of this form to:

Texas Regional Entity Rashida Caraway 512-225-7056 rashida.caraway@texasre.org



# Attachment g

# Post Oak's Certification of Mitigation Plan Completion for VAR-002-1 R2 dated February 3, 2010



## **Mitigation Plan Completion Certification**

Submittal of a Mitigation Plan Completion Certification shall include data or information sufficient for Texas Regional Entity to verify completion of the Mitigation Plan. Texas Regional Entity 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: Post Oak Wind, LLC

NERC Registry ID: 10167

Date of Submittal of Certification: February 3, 2010

NERC Violation ID No(s): TRE200800062

Reliability Standard and the Requirement(s) of which a violation was mitigated: VAR-002-1 R.2

Date Mitigation Plan was scheduled to be completed per accepted Mitigation Plan:

Date Mitigation Plan was actually completed: April 22, 2009 (except for certain actions ongoing that will continue through the duration of Post Oak's business arrangement with APX.) Additional Comments (or List of Documents Attached):

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: Brian Hayes

Title: Director of Asset Management

Email: brian.hayes@horizonwind.com

Phone: (713) 265-0245

2700 Via Fortuna, Suite 225

Austin, Texas 78746

Tel: (512) 225-7000

Fax: (512) 225-7165

TEXAS REGIONAL ENTITY A language during of predi	
Authorized Signature	Date 2/3/2010
	Anoc

Please submit completed forms or any questions regarding completion of this form to the mitigation@texasrc.org.

Please indicate the company name and reference the NERC Violation ID # (if known) in the subject line of the e-mail.



## Attachment h

# Texas RE's Verification of Mitigation Plan Completion for IRO-001-1 R8 and VAR-002-1 R2 dated July 6, 2010



July 6, 2010

Mary Lou Ideus Regulatory Reporting Specialist marylou.ideus@horizonwind.com

Post Oak Wind, LLC NERC ID#: NCR10167 Violation Number(s): TRE200800061 TRE200800062

Re: Texas Reliability Entity Mitigation Plan Verification of Completion

Ms. Ideus:

North American Electric Reliability Corporation (NERC) delegated authority to Texas Reliability Entity, Inc. to become the regional entity for the ERCOT region effective July 1, 2010, pursuant to Section 215(e)(4) of the Federal Power Act. NERC also delegated to Texas Reliability Entity, Inc. the authority and responsibility for the continuation of all compliance monitoring and enforcement activities that it had previously delegated to Texas Regional Entity (a division of Electric Reliability Council of Texas, Inc.) The term "Texas RE" is used herein to refer to both Texas Regional Entity and Texas Reliability Entity, Inc.

As a result of a Spot Check dated September 11, 2008, it was determined that Post Oak Wind, LLC ("Post Oak") was found to be in violation of NERC Reliability Standards IRO-001-1, R8 and VAR-002-1, R2.

<u>IRO-001-1, R8</u>: On May 22, 2008, ERCOT ISO issued a verbal directive to Post Oak Wind, LLC to increase VAR production to assist a low voltage situation on the grid. Post Oak Wind, LLC did not provide the required assistance, nor did they provide a valid reason for failing to increase VAR output as directed. During the time of the violation, Post Oak Wind, LLC had contracted with J Aron as the Generator Operator (GOP) for their facility, and J Aron had subcontracted the GOP responsibilities to APX.

Based on e-mails, operator logs, and recorded telephone conversations between ERCOT ISO and Post Oak/J Aron/APX, Texas RE has found Post Oak to be non-compliant with NERC Reliability Standard IRO-001-1, R8.

<u>VAR-002-1, R2</u>: Following the events listed above, ERCOT ISO contacted the Post Oak Wind Farm Plant Manager. ERCOT ISO once again asked Post Oak if they would be able to help the system by increasing VAR support. The Plant Manager stated that the main breaker for the capacitors can't be remotely controlled and therefore are not in service because of recent high voltage events. The Plant Manager also stated that Post Oak Wind Farm could not voltage-regulate with the units. The Plant Manager stated that their connecting Transmission Owner



does not have reactors to control their own voltage and they were dropped three times because of the high voltage events. The ERCOT ISO Operator and the Post Oak Wind Farm Plant Manager also discussed the Long Creek bus voltage being 351 KV. The Plant Manager believed that should be sufficient. The ERCOT ISO Operator then told him about the system condition, and the Plant Manager said he would send someone to look at the main breaker for the capacitors.

Based on e-mails, operator logs, and recorded telephone conversations between ERCOT ISO and Post Oak/J Aron/APX, Texas RE has found Post Oak to be non-compliant with NERC Reliability Standard VAR-002-1, R2.

Post Oak provided Texas RE with the following types of documentation in order to demonstrate that the actions listed in Mitigation Plans MIT-08-2404 (IRO-001-1, R8) and MIT-08-2405 (VAR-001-1, R2) have been completed:

- 1. Signed Agreement for remote capacitor bank control
- 2. Correspondence regarding installation and testing of remote capacitor bank control
- 3. Correspondence regarding installation of Reactive Power Control module for turbine equipment
- 4. Training agendas
- 5. Training procedures and presentations regarding voltage support
- 6. Training sign-in sheets
- 7. Travel documentation
- 8. Requirements for real time desk operations' contractors

<u>IRO-001-1 R8</u>: Texas RE reviewed items 2 and 8 to confirm that Post Oak installed and trained APX on remote control of the capacitor bank, as well as responding to ERCOT ISO directives. Texas RE also reviewed items 4, 5, 6 and 7 to confirm that Post Oak has met with APX and other operations personnel to revise their operating procedures, to discuss the event, and to discuss compliance with NERC Reliability Standards. Lastly, Texas RE reviewed items 4, 5, 6 and 7 to confirm that Post Oak regularly meets with APX, and that Post Oak has revised items 4, 5, 6 and 7 to confirm that Post Oak regularly meets with APX, and that Post Oak has revised its operating/training procedures to ensure APX's proper day-to-day operations. Item 8 was reviewed by Texas RE to verify that Post Oak has revised its requirements for all 24-hour services vendors, such as APX. Post Oak requires service vendors to have a 24-hour desk.

<u>VAR-002-1 R2</u>: Texas RE reviewed item 3 to confirm that Post Oak rectified the Reactive Power Control capabilities for low-output/leading power-factor situations. Texas RE reviewed items 1 and 2 to confirm that Post Oak installed and tested remote capacitor bank control systems. Texas RE reviewed items 4, 5, 6, and 7 to ensure that both its and APX's personnel were trained in the operation of the control system as well as responding to ERCOT ISO directives. Texas RE also reviewed items 4, 5, 6 and 7 to confirm that Post Oak regularly meets with APX, and that Post Oak has revised its operating/training procedures to ensure APX's proper day-to-day operations. Item 8 was reviewed by Texas RE to verify that Post Oak has revised its requirements for all 24-hour services vendors, such as APX. Post Oak requires service vendors to have the ability to change voltage.



Based on evidence presented by Post Oak and reviewed by Texas RE, this letter confirms the above mentioned mitigation plans are complete. If you have any questions, please feel free to contact Andy Oliver at (512) 583-4976 or via e-mail at Andy.Oliver@TexasRE.org.

Respectfully submitted,

Rashida Caraway Texas Reliability Entity Manager, Compliance Enforcement (512) 583-4977 Email: <u>Rashida.Caraway@TexasRE.org</u>



# Attachment i

**Notice of Filing** 

### UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Post Oak Wind, LLC

Docket No. NP10-\_\_\_-000

### NOTICE OF FILING September 52, 2010

Take notice that on September 52, 2010, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding Post Oak Wind, LLC in the Texas Reliability Entity 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