#### NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

May 28, 2020

# VIA ELECTRONIC FILING

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

#### Re: NERC Full Notice of Penalty regarding DTE Electric Company, FERC Docket No. NP20-\_-000

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty<sup>1</sup> regarding DTE Electric Company (DTE), NERC Registry ID# NCR00753,<sup>2</sup> with information and details regarding the nature and resolution of the violations<sup>3</sup> discussed in detail in the Settlement Agreement attached hereto (Attachment 1), in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations, and orders, as well as NERC's Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).<sup>4</sup>

NERC is filing this Notice of Penalty with the Commission because ReliabilityFirst Corporation (ReliabilityFirst) and DTE have entered into a Settlement Agreement to resolve all outstanding issues arising from ReliabilityFirst's determination and findings of one serious risk violation and one moderate risk violation of the Protection and Control (PRC) Reliability Standards.

According to the Settlement Agreement, DTE admits to the violations of the NERC PRC Reliability Standards and agrees to the penalty of three hundred and seventy-five thousand dollars (\$375,000).

1325 G Street NW Suite 600 Washington, DC 20005 202-400-3000 | <u>www.nerc.com</u>

<sup>&</sup>lt;sup>1</sup> Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards, Order No. 672, 114 FERC ¶ 61,104, order on reh'g, Order No. 672-A, 114 FERC ¶ 61,328 (2006); Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the N. Am. Elec. Reliability Corp., Docket No. RM05-30-000 (February 7, 2008); Mandatory Reliability Standards for the Bulk-Power System, Order No. 693, 118 FERC ¶ 61,218, order on reh'g, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

<sup>&</sup>lt;sup>2</sup> DTE was included on the NERC Compliance Registry as a Balancing Authority (BA) on January 6, 2009; and as a Distribution Provider (DP), Generator Owner (GO), Generator Operator (GOP), and Resource Planner (RP) on May 30, 2007.

<sup>&</sup>lt;sup>3</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>&</sup>lt;sup>4</sup> See 18 C.F.R § 39.7(c)(2) and 18 C.F.R § 39.7(d).

#### Statement of Findings Underlying the Violation

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement, by and between ReliabilityFirst and DTE. 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 (2020), NERC provides the following summary table identifying the violation of a Reliability Standard resolved by the Settlement Agreement. Further information on the subject violation is set forth in the Settlement Agreement and herein.

Violation(s) Determined and Discovery Method *SR = Self-Report / SC = Self-Certification / CA = Compliance Audit / SPC = Spot Check / CI = Compliance Investigation								
NERC Violation ID	Standard	Req.	VRF/VSL	Applicable Function(s)	Discovery Method* Date	Violation Start-End Date	Risk	Penalty Amount
RFC2017017450	PRC-005-1	R2	High/ Lower	GO	SR 4/17/2017	6/18/2007 _ 9/15/2017	Moderate	\$375k
RFC2018018988	PRC-005- 1.1b	R2	High/ Lower	DP, GO	CA 1/4/2018	11/25/2013 - 12/15/2019	Serious	<i>φ</i> ογοκ

DTE is a wholly-owned subsidiary of DTE Energy. DTE operates sub-transmission and distribution lines and serves approximately 2.1 million customers in southeastern Michigan. DTE has in excess of 12,500 megawatts of generating capacity and uses coal, nuclear fuel, natural gas, oil, hydroelectric pumped storage, and renewable resources to generate electricity. DTE has numerous interconnection points with ITC Transmission Company at 120 kilovolts (kV), 230 kV, and 345 kV.

#### <u>PRC-005 – 1 R2</u>

On April 17, 2017, DTE submitted a Self-Report stating that, as a Generator Owner (GO), it was in violation of PRC-005-1 R2. Specifically, DTE had not maintained or tested relays for four Combustion

Turbine Generators (CTGs) at the Enrico Fermi Nuclear Power Plant (Fermi) since the late 1990s.<sup>5</sup> The CTGs were attached to a 120 kV switchyard. Three of the CTGs were dispatchable peakers (i.e., used for emergency peaks in demand for power), and one CTG was designated as an alternate alternating current (AC) power source at Fermi.

The contributing factors to this violation were the initial misclassification of relay maintenance requirements for the CTGs in Fermi's maintenance system, a lack of effective detective controls and procedures, and the presence of vertical silos between Fermi personnel and a separate DTE engineering team.

ReliabilityFirst determined that the violation posed a moderate risk to the reliability of the bulk power system (BPS). Neglecting to maintain and test Protection System devices could lead to device malfunction, premature or undetected device failure, and Protection System misoperation. The risk was partially mitigated based on the minimal amount of generation at issue and because they were emergency generators that are rarely used. However, the length of this violation, coupled with the fact that one of the CTGs was an alternate AC source for Fermi, made this a moderate risk.

DTE submitted its Mitigation Plan to address the referenced violation. Attachment 1 includes a description of the mitigation activities DTE took to address this violation. A copy of the Mitigation Plan is included as Attachment B to the Settlement Agreement.

DTE certified that it had completed all mitigation activities. ReliabilityFirst verified that DTE had completed all mitigation activities as of September 15, 2017. Attachment 1 and Attachment D to the Settlement Agreement provide specific information on ReliabilityFirst's verification of DTE's completion of the activities.

#### PRC-005-1.1b R2

DTE initially identified, and communicated to ReliabilityFirst, issues during audit preparation, and the issues were further investigated during a Compliance Audit and a subsequent extent of condition review. On January 4, 2018, ReliabilityFirst determined that DTE, as a DP and GO, was in violation of PRC-005-1.1b R2. The audit team reviewed submittals from DTE and determined that nine out of thirty-three samples did not satisfy the requirements of PRC-005. DTE conducted an extensive review of all

<sup>&</sup>lt;sup>5</sup> The aggregate power producing capability of the CTGs was slightly above the threshold (75 MVA) for mandatory maintenance and testing.

protection system components and discovered that it had insufficient testing and maintenance records for 325 (6.67 percent) of its total applicable components.<sup>6</sup>

The root causes of this violation were the following:

- Incomplete and inaccurate equipment inventory records;
- Running parallel systems to track testing that were both ineffective;
- A multi-year backlog of unchecked test records;
- A failure to include certain components in its maintenance and testing program; and
- A failure to understand applicable standards and requirements.

ReliabilityFirst determined that the violation posed a serious risk to the reliability of the BPS. Protection System issues could have significant consequences related to equipment damage and power system performance. The scope of this violation and variety of causes and issues exacerbated the risk, as they evidenced a programmatic failure.

DTE submitted its Mitigation Plan to address the referenced violation. Attachment 1 includes a description of the mitigation activities DTE took to address this violation. A copy of the Mitigation Plan is included as Attachment F to the Settlement Agreement.

DTE certified that it had completed all mitigation activities.

#### Regional Entity's Basis for Penalty

According to the Settlement Agreement, ReliabilityFirst assessed a penalty of three hundred and seventy-five thousand dollars (\$375,000) for the referenced violations. In reaching this determination, ReliabilityFirst considered the following factors:

1. DTE was cooperative throughout the enforcement process;

<sup>&</sup>lt;sup>6</sup> This violation involved 325 instances with varying durations. The earliest instances involved lost or missing records of prior maintenance and testing activities under PRC-005-1.1b, resulting in the overall start date of November 25, 2013 (i.e., the effective date of PRC-005-1.1b). Some of those instances were corrected prior to the overall Mitigation Plan completion date (e.g., subsequent test performed February 5, 2015, subsequent test performed March 16, 2016, etc.). Separate instances involved a variety of issues relating to specific tests or components under PRC-005-6 (e.g., several months late on a trip path test of an auxiliary relay [PRC-005-6 – Table 1-5, Row 4 – 12 Calendar Year Maximum Maintenance Interval], two years late on testing of an unmonitored relay [PRC-005-6 – Table 1-1, Row 1 – 6 Calendar Year Maximum Maintenance Interval]). Under the currently-applicable Standard and Requirement (i.e., PRC-005-6), the vast majority (i.e., approximately 98.8%) of the affected components have maximum maintenance intervals of 6 and 12 years.

- 2. DTE self-reported one of the violations;
- 3. DTE admitted to the violations;
- 4. DTE agreed to settle the violations;
- 5. ReliabilityFirst considered the instant violations as repeat noncompliance with the subject NERC Reliability Standards. ReliabilityFirst considered DTE's compliance history with PRC-005 as an aggravating factor in the penalty determination;<sup>7</sup>
- 6. The violations of PRC-005-1 R2 and PRC-005-1.1b R2 posed a moderate risk and a serious and substantial risk to the reliability of the BPS, respectively; and
- 7. There were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

After consideration of the above factors, ReliabilityFirst determined that, in this instance, the penalty amount of three hundred and seventy-five thousand dollars (\$375,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violations.

#### Statement Describing the Assessed Penalty, Sanction, or Enforcement Action Imposed<sup>8</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, October 26, 2009 and August 27, 2010 Guidance Orders,<sup>9</sup> the NERC BOTCC reviewed the violations on May 12, 2020 and approved the resolution between ReliabilityFirst and DTE. In approving the resolution, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the violations at issue.

For the foregoing reasons, the NERC BOTCC approved the resolution and believes that the assessed penalty of three hundred and seventy-five thousand dollars (\$375,000) is appropriate for the violations

<sup>&</sup>lt;sup>7</sup> DTE's relevant prior noncompliance with PRC-005 R2 includes: NERC Violation IDs RFC201000663 and RFC201100818. DTE also had similar noncompliance, disposed of as Compliance Exceptions, in NERC Violation IDs RFC2016015596 and RFC2016016340.

<sup>&</sup>lt;sup>8</sup> See 18 C.F.R. § 39.7(d)(4).

<sup>&</sup>lt;sup>9</sup> N. Am. Elec. Reliability Corp., "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008); N. Am. Elec. Reliability Corp., "Further Guidance Order on Reliability Notices of Penalty," 129 FERC ¶ 61,069 (2009); N. Am. Elec. Reliability Corp., "Notice of No Further Review and Guidance Order," 132 FERC ¶ 61,182 (2010).

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 Notice of Penalty with FERC, or, if FERC decides to review the penalty, upon final determination by FERC.

#### 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:

- 1. Settlement Agreement by and between ReliabilityFirst and DTE executed January 30, 2020, included as Attachment 1;
  - a. DTE's Self-Report for PRC-005-1 R2 dated April 17, 2007, included as Attachment A to the Settlement Agreement;
  - b. DTE's Mitigation Plan designated as RFCMIT012859 for PRC-005-1 R2 submitted May 2, 2017, included as Attachment B to the Settlement Agreement;
  - c. DTE's Certification of Mitigation Plan Completion for PRC-005-1 R2 dated September 15, 2017, included as Attachment C to the Settlement Agreement;
  - d. ReliabilityFirst's Verification of Mitigation Plan Completion for PRC-005-1 R2 dated October 11, 2017, included as Attachment D to the Settlement Agreement;
  - e. ReliabilityFirst's Potential Noncompliance Identification Form for PRC-005-1.1b R2 dated December 29, 2017, included as Attachment E to the Settlement Agreement;
  - f. DTE's Mitigation Plan designated as RFCMIT013607-1 for PRC-005-6 R3 submitted August 14, 2018, included as Attachment F to the Settlement Agreement;
  - g. DTE's Certification of Mitigation Plan Completion for PRC-005-1.1b R2 dated December 13, 2019, included as Attachment G to the Settlement Agreement;

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

*Persons to be included on the Commission's	Teresina Stasko*
service list are indicated with an asterisk. NERC	Assistant General Counsel and Director of
requests waiver of the Commission's rules and	Enforcement
regulations to permit the inclusion of more than	North American Electric Reliability Corporation
two people on the service list.	1325 G Street NW, Suite 600
	Washington, DC 20005
Niki Schaefer	(202) 400-3000
Vice President and General Counsel	(202) 644-8099 – facsimile
ReliabilityFirst Corporation	teresina.stasko@nerc.net
3 Summit Park Drive, Suite 600	
Cleveland, OH 44131	James McGrane*
niki.schaefer@rfirst.org	Senior Counsel
216-503-0611 Phone	North American Electric Reliability Corporation
	1325 G Street NW, Suite 600
Kristen M. Senk*	Washington, DC 20005
Senior Managing Counsel, Legal and	(202) 400-3000
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ReliabilityFirst Corporation	james.mcgrane@nerc.net
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Manager-Legal	
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Detroit, MI 48226 Kathrine.Lorenz@dteenergy.com 313-235.4856 Phone

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Michael Reterstorf\* Manager IT BU Consulting DTE Electric Company One Energy Plaza Detroit MI, 48226 michael.reterstorf@dteenergy.com 313-235-5428 Phone

Karnail Singh\* Manager-NERC Compliance Programs DTE Electric Company One Energy Plaza Detroit, MI 48226 karnail.singh@dteenergy.com 313-235-8936 Phone

#### Conclusion

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

Respectfully submitted,

/s/ Alexander Kaplen Teresina Stasko Assistant General Counsel and Director of Enforcement James McGrane Senior Counsel Alexander Kaplen Associate Counsel North American Electric Reliability Corporation 1325 G Street NW Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 - facsimile teresina.stasko@nerc.net james.mcgrane@nerc.net alexander.kaplen@nerc.net

cc: DTE Electric Company ReliabilityFirst Corporation

Attachments



Attachment 1

Settlement Agreement by and between ReliabilityFirst and DTE executed January 30, 2020

**RELIABILITY | RESILIENCE | SECURITY** 



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#### In re: DTE ELECTRIC COMPANY

NERC Registry ID No. NCR00753

Violation ID Nos.: RFC2017017450 (PRC-005-1 R2) RFC2018018988 (PRC-005-1.1b R2)

#### SETTLEMENT AGREEMENT BETWEEN RELIABILITYFIRST CORPORATION AND DTE ELECTRIC COMPANY

#### I. INTRODUCTION

- 1. ReliabilityFirst Corporation ("ReliabilityFirst") and DTE Electric Company ("DTE") (collectively, the "Parties") enter into this Settlement Agreement ("Agreement") to resolve violations by DTE of the above-captioned Reliability Standards and Requirements.<sup>1</sup>
- 2. The Parties stipulate to the facts in this Agreement for the sole purpose of resolving the violations. DTE admits that these facts constitute violations of the above-captioned Reliability Standards and Requirements and takes responsibility for the noncompliance.

#### II. OVERVIEW OF DTE

3. DTE is a wholly-owned subsidiary of DTE Energy. DTE operates sub-transmission and distribution lines and serves approximately 2.1 million customers in southeastern Michigan. DTE has in excess of 12,500 megawatts ("MW") of generating capacity and uses coal, nuclear fuel, natural gas, oil, hydroelectric pumped storage, and renewable resources to generate electricity. DTE has numerous interconnection points with ITC Transmission Company at 120 kilovolts ("kV"), 230 kV, and 345 kV.

<sup>&</sup>lt;sup>1</sup> This Agreement references the version of the Reliability Standard in effect at the time each violation began. DTE, however, committed to perform mitigating actions to comply with the most recent version of each Reliability Standard and Requirement.

4. DTE is registered on the NERC Compliance Registry as a Balancing Authority ("BA"), Distribution Provider ("DP"), Generator Owner ("GO"), Generator Operator ("GOP"), and Resource Planner ("RP") in the ReliabilityFirst region. DTE, in its capacity as a DP and GO, is subject to compliance with the above-captioned Reliability Standards and Requirements.

## III. EXECUTIVE SUMMARY

#### Brief Overview of the Violations and Penalty

- 5. This Agreement resolves two violations of the Protection and Control (PRC) Reliability Standards and Requirements.<sup>2</sup> The first violation (RFC2017017450) posed a moderate risk to the reliability and resilience of the Bulk Power System (BPS). It was discovered by DTE and self-reported in April, 2017. The second violation (RFC2018018988) posed a serious and substantial risk to the reliability and resilience of the BPS. DTE initially identified, and communicated to ReliabilityFirst, issues during audit preparation, and the issues were further investigated during the audit and a subsequent extent of condition review.
- 6. The first violation involved DTE's failure to complete generator relay maintenance and testing for four Combustion Turbine Generators (CTGs) at the Enrico Fermi Nuclear Power Plant ("Fermi"). Three of the CTGs were peakers, and the fourth was an alternate alternating current (AC) power source at Fermi. The lack of maintenance and testing was caused by the initial misclassification of relay maintenance requirements for the CTGs in Fermi's maintenance system. And, the issue persisted for several years due to a lack of sufficient detective controls and procedures. This violation posed a moderate risk to the reliability and resilience of the BPS based, in part, on the length of the violation coupled with the fact that one of the CTGs was an alternate AC source for the Fermi plant.
- 7. The second violation includes 325 instances of noncompliance with PRC-005 (6.67% of applicable components). DTE initially identified, and communicated to ReliabilityFirst, some of the issues in preparation for a Compliance Audit that was conducted in December 2017. The issues were further investigated during the audit and subsequent extent of condition review. The second violation posed a serious and substantial risk to the reliability and resilience of the BPS. The duration, scope, and variety of issues exacerbated the risk, as they evidenced a programmatic failure. The violation involved poor record management and a lack of controls in DTE's maintenance and testing program.
- 8. DTE's Mitigation Plan for RFC2018018988 is designed to drastically improve oversight, accountability, and accuracy in its relay maintenance and testing program. This will be achieved, in part, through: (a) the development of a comprehensive inventory list; (b) the creation of adequate process documentation to assist in maintaining accurate information; (c) the migration of its protection

<sup>&</sup>lt;sup>2</sup> The facts related to the violations are set forth in Attachment A, which is incorporated herein by reference.

system inventory list into an electronic work management system; and (d) training responsible personnel on the improvements.

- 9. The violations resolved in this Agreement did not involve device malfunction, premature or undetected device failure, or misoperation, and no harm is known to have occurred.
- 10. ReliabilityFirst determined that a penalty is appropriate in this case, in large part, because of the serious risk violation, which involved programmatic issues. ReliabilityFirst has levied a monetary penalty of \$375,000.00.

#### IV. ADJUSTMENT FACTORS

11. In addition to the facts and circumstances stated above, ReliabilityFirst considered the following factors in its penalty determination.

#### Self-Identification and Self-Reporting

12. Even though the first violation persisted for several years and was not discovered through the execution of recurring detective controls, DTE self-identified and self-reported the issue prior to detection or intervention by ReliabilityFirst. Effective oversight of the reliability and resilience of the Bulk Electric System (BES) depends upon self-reporting by Registered Entities. ReliabilityFirst seeks to encourage self-reporting of offenses and, therefore, is applying some mitigating credit relating to the first violation (RFC2017017450).<sup>3</sup>

#### Cooperation

13. DTE has been highly cooperative throughout the entire enforcement process relating to these violations. Throughout the enforcement process, DTE voluntarily provided ReliabilityFirst with information that was timely, detailed, thoughtful, organized, and thorough. DTE fully cooperated in ReliabilityFirst's investigation of the violations and all associated mitigating activities and openly shared information regarding its processes, procedures, internal controls, assets, systems, and organization. DTE was especially cooperative through the mitigation verification process while ReliabilityFirst conducted what amounted to a spot check of DTE's PRC-005 program. This insight allowed ReliabilityFirst to better analyze the violations and assist DTE in resolving the same. Thus, ReliabilityFirst applied mitigating credit.

#### Admission of Noncompliance

14. DTE recognized and affirmatively accepted responsibility for its conduct by admitting to the violations and entering into this Agreement. ReliabilityFirst is applying mitigating credit since there is independent value in organizations

<sup>&</sup>lt;sup>3</sup> ReliabilityFirst is not applying this type of mitigating credit for the second violation (RFC2018018988), which ReliabilityFirst discovered during a Compliance Audit.

accepting responsibility for their violations.

#### Compliance History

15. When assessing the penalty for the violations at issue in this Agreement, ReliabilityFirst considered whether the facts of these violations constitute repetitive infractions. DTE has prior violations of PRC-005. ReliabilityFirst notes that some of these prior violations involved different facts, circumstances, and/or causes. However, the violations resolved within this Agreement arguably involve similar facts, circumstances, and/or causes as some of the prior violations. In those cases, ReliabilityFirst has considered the prior violations as an aggravating factor in the penalty determination.

#### V. PENALTY

- 16. Based upon the foregoing, DTE shall pay a monetary penalty of \$375,000.00 to ReliabilityFirst.
- 17. ReliabilityFirst shall present an invoice to DTE within 20 days after the Agreement is approved by the Commission or affirmed by operation of law. Upon receipt, DTE shall have 30 days to remit payment. ReliabilityFirst will notify NERC if it does not timely receive the payment from DTE.
- 18. If DTE fails to timely remit the monetary penalty payment to ReliabilityFirst, interest will commence to accrue on the outstanding balance, pursuant to 18 C.F.R. § 35.19a (a)(2)(iii), on the earlier of (a) the 31st day after the date on the invoice issued by ReliabilityFirst to DTE for the monetary penalty payment or (b) the 51st day after the Agreement is approved by the Commission or operation of law.

#### VI. ADDITIONAL TERMS

- 19. The Parties agree that this Agreement is in the best interest of BES reliability. The terms and conditions of the Agreement are consistent with the regulations and orders of the Commission and the NERC Rules of Procedure.
- 20. ReliabilityFirst shall report the terms of all settlements of compliance matters to NERC. NERC will review the Agreement for the purpose of evaluating its consistency with other settlements entered into for similar violations or under similar circumstances. Based on this review, NERC will either approve or reject this Agreement. If NERC rejects the Agreement, NERC will provide specific written reasons for such rejection and ReliabilityFirst will attempt to negotiate with DTE a revised settlement agreement that addresses NERC's concerns. If a settlement cannot be reached, the enforcement process will continue to conclusion. If NERC approves the Agreement, NERC will (a) report the approved settlement to the Commission for review and approval by order or operation of law and (b) publicly post the violations and the terms provided for in this Agreement.

- 21. This Agreement binds the Parties upon execution, and may only be altered or amended by written agreement executed by the Parties. DTE expressly waives its right to any hearing or appeal concerning any matter set forth herein, unless and only to the extent that DTE contends that any NERC or Commission action constitutes a material modification to this Agreement.
- 22. ReliabilityFirst reserves all rights to initiate enforcement action against DTE in accordance with the NERC Rules of Procedure in the event that DTE fails to comply with any of the terms or conditions of this Agreement. DTE retains all rights to defend against such action in accordance with the NERC Rules of Procedure.
- 23. DTE consents to ReliabilityFirst's future use of this Agreement for the purpose of assessing the factors within the NERC Sanction Guidelines and applicable Commission orders and policy statements, including, but not limited to, the factor evaluating DTE's history of violations. Such use may be in any enforcement action or compliance proceeding undertaken by NERC or any Regional Entity or both, provided however that DTE does not consent to the use of the conclusions, determinations, and findings set forth in this Agreement as the sole basis for any other action or proceeding brought by NERC or any Regional Entity or both, nor does DTE consent to the use of this Agreement by any other party in any other action or proceeding.
- 24. DTE affirms that all of the matters set forth in this Agreement are true and correct to the best of its knowledge, information, and belief, and that it understands that ReliabilityFirst enters into this Agreement in express reliance on the representations contained herein, as well as any other representations or information provided by DTE to ReliabilityFirst during any DTE interaction with ReliabilityFirst relating to the subject matter of this Agreement.
- 25. Upon execution of this Agreement, the Parties stipulate that each possible violation addressed herein constitutes a violation. The Parties further stipulate that all required, applicable information listed in Section 5.3 of the CMEP is included within this Agreement.
- 26. Each of the undersigned agreeing to and accepting this Agreement warrants that he or she is an authorized representative of the party designated below, is authorized to bind such party, and accepts the Agreement on the party's behalf.
- 27. The undersigned agreeing to and accepting this Agreement warrant 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 the Parties has been made to induce the signatories or any other party to enter into this Agreement.
- 28. The Agreement may be signed in counterparts.
- 29. If this Agreement is executed in duplicate, each so executed shall be deemed to be

an original.

# [SIGNATURE PAGE TO FOLLOW]<sup>5</sup>

# [REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

<sup>&</sup>lt;sup>5</sup> An electronic version of this executed document shall have the same force and effect as the original.

**ENDORSED BY:** 

511

JAN 3 0 2020

Robert Eckenrod Vice President and General Counsel ReliabilityFirst Corporation

AGREED TO AND ACCEPTED BY:

**DTE Electric Company:** 

Trevor F. Lauer President & Chief Operating Officer DTE Electric Company Date

Date

**ReliabilityFirst Corporation** 

 $\overline{\mathbf{a}}$ 

Timothy R. Gallagher President & Chief Executive Officer ReliabilityFirst Corporation

JAN 3 0 2020

Date

#### **ENDORSED BY:**

Robert Eckenrod Vice President and General Counsel ReliabilityFirst Corporation Date

#### AGREED TO AND ACCEPTED BY:

DTE Electric Company:

Trevor F. Lauer President & Chief Operating Officer DTE Electric Company

1/27/2020 Date

#### **ReliabilityFirst Corporation**

Timothy R. Gallagher President & Chief Executive Officer ReliabilityFirst Corporation

Date

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#### VII. VIOLATIONS

#### A. PRC-005-1 R2 (RFC2017017450)

- 30. PRC-005 increases the reliability of the BPS by ensuring the maintenance and testing of all transmission and generation Protection Systems, which isolate segments of the Bulk Electric System (BES) when faults occur.
- 31. A violation of PRC-005 R2 has the potential to affect the reliable operation of the BES by allowing important Protection System devices to remain unmaintained and untested.
- 32. PRC-005-1 R2 states:
  - **R2.** Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30 calendar days). The documentation of the program implementation shall include:
    - **R2.1.** Evidence Protection System devices were maintained and tested within the defined intervals.
    - R2.2. Date each Protection System device was last tested/maintained

#### Description of Violation and Risk Assessment

- 33. On April 17, 2017, DTE submitted a Self-Report to ReliabilityFirst stating that, as a GO, it was in violation of PRC-005-1 R2. *See*, Self-Report, **Attachment A**. Specifically, DTE had not maintained or tested relays for four CTGs at the Fermi plant since the late 1990s.<sup>6</sup> The CTGs (CTG 11-1 through CTC 11-4) were attached to a 120kV switchyard. Three of the CTGs (CTG 11-2 through CTG 11-4) were dispatchable peakers (i.e., used for emergency peaks in demand for power), and CTG 11-1 was designated as an alternate AC power source at Fermi. The violation was discovered during the Fermi refueling outage package review.
- 34. Two major contributing factors to this violation were: (a) the initial misclassification of relay maintenance requirements for the CTGs in Fermi's maintenance system; and (b) a lack of effective detective controls and procedures, which would have assisted in preventing this issue from persisting. Regarding the former, relay maintenance was incorrectly coded as "corrective" for the CTGs; it

<sup>&</sup>lt;sup>6</sup> The aggregate power producing capability of the CTGs was slightly above the threshold (75 MVA) for mandatory maintenance and testing.

should have been coded as "preventative." As an example of the latter, protection engineers were working with a one-line diagram that did not display MVA and, therefore, were unaware that the aggregate power producing capability of the CTGs exceeded the MVA threshold for mandatory maintenance and testing. An additional contributing factor to this violation was the presence of vertical silos between Fermi personnel and a separate DTE engineering team. There was some awareness that maintenance and testing should be scheduled, but there was confusion regarding which group was responsible for scheduling maintenance and testing. Due to a breakdown in communication, neither team scheduled maintenance and testing.

- 35. This violation implicates the management practices of grid maintenance and workforce management. Grid maintenance was involved due to the entity's failure to ensure equipment reliability and resilience by proactively monitoring, maintaining, and testing equipment. Workforce management was involved because the issue could have been prevented (or resolved in a more timely manner) through better training and the implementation of effective controls and procedures.
- 36. The violation began on June 18, 2007, when DTE was required to comply with PRC-005-1 R2. The violation ended on September 15, 2017, after DTE added the relays for the CTGs to its maintenance system and performed required maintenance and testing.
- 37. ReliabilityFirst determined that the violation posed a moderate risk to the reliability of the BPS.<sup>7</sup> Neglecting to maintain and test Protection System devices could lead to device malfunction, premature or undetected device failure, and Protection Protection System issues could have significant System misoperation. consequences related to equipment damage and power system performance (e.g., generating unit or system instability, unacceptable loss of load or generation, cascading, or uncontrolled system separation). The risk was somewhat mitigated based on the minimal amount of generation at issue (i.e., slightly more than 75 MVA in the aggregate) and the fact that these were emergency generators that are rarely used. However, the length of this violation coupled with the fact that CTG 11-1 was an alternate AC source for Fermi made this a moderate risk and not a minimal risk, and more appropriate for a settlement agreement as opposed to an alternate disposition. If CTG 11-1 had been needed, an issue with its operation could have created serious safety issues at Fermi.

#### **Mitigating Actions**

38. On May 2, 2017, DTE submitted to ReliabilityFirst a Mitigation Plan to address the Violation of PRC-005-1 R2. *See* RFCMIT012859, **Attachment B**. On May 5, 2017, ReliabilityFirst accepted the Mitigation Plan.

<sup>&</sup>lt;sup>7</sup> PRC-005-1 R2 has a VRF of "High" pursuant to the VRF Matrix. According to the VSL Matrix, this issue warranted a "Lower" VSL.

- 39. In the Mitigation Plan, DTE committed to take the following actions by October 13, 2017.<sup>8</sup> First, DTE added peaker relay maintenance into Maximo (DTE's work management system). Second, DTE performed the required generator relay maintenance on the CTGs.
- 40. On September 15, 2017, DTE certified to ReliabilityFirst that it completed this Mitigation Plan as of September 15, 2017. *See* Certification of Mitigation Plan Completion, **Attachment C**. On October 11, 2017, ReliabilityFirst verified DTE's completion of this Mitigation Plan. *See* Mitigation Plan Verification for RFCMIT012859, **Attachment D**.
- 41. It worth noting that DTE also completed an extent of condition review, which was not required as part of the Mitigation Plan. Since the misclassification of relay maintenance requirements related to peakers, DTE compared its asset list to its protection system maintenance list and verified that no similar issues existed for other peakers.

#### B. PRC-005-1.1b R2 (RFC2018018988)

- 42. PRC-005 increases the reliability of the BPS by ensuring the maintenance and testing of all transmission and generation Protection Systems, which isolate segments of the BES when faults occur.
- 43. A violation of PRC-005 R2 has the potential to affect the reliable operation of the BES by allowing important Protection System devices to remain unmaintained and untested.
- 44. PRC-005-1.1b R2 states:
  - **R2.** Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation or generator interconnection Facility Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Entity on request (within 30 calendar days). The documentation of the program implementation shall include:
    - **R2.1.** Evidence Protection System devices were maintained and tested within the defined intervals.
    - **R2.2.** Date each Protection System device was last tested/maintained.

Description of Violation and Risk Assessment

45. On January 4, 2018, ReliabilityFirst determined that DTE, as a DP and GO, was in

<sup>&</sup>lt;sup>8</sup> DTE originally committed to complete the Mitigation Plan by July 21, 2017; however, DTE requested an extension of time, which ReliabilityFirst subsequently granted.

violation of PRC-005-1.1b R2<sup>9</sup> during a Compliance Audit conducted from December 4, 2017 through December 8, 2017. *See* PV Identification Form, **Attachment E**. The audit team reviewed submittals from the entity regarding testing/maintenance under PRC-005-6 and determined that nine out of thirty-three samples did not satisfy the requirements of PRC-005, including instances implicating a prior version of the Standard and Requirement (i.e., PRC-005-1.1b R2). ReliabilityFirst noted a varying nature of compliance issues, including missed schedules, lost records, and a failure to understand the scope and requirements of PRC-005-6. The issues involved various types of components at multiple locations.<sup>10</sup>

46. Due to the volume and scope of issues identified in the audit sample and the apparent variety of causes, ReliabilityFirst instructed the entity to conduct an extensive review of all protection system components. The entity completed its review and discovered that it had insufficient testing and maintenance records for 6.67% of its total, applicable components. The following table breaks down the issues by component type:

Туре	Number of Components with Insufficient Evidence of Testing/Maintenance	Total Number of Applicable Components in Entity's System	Percentage of Components in Noncompliance
Relays	111	1,808	6.14%
Voltage Sensing Devices (VSDs)	49	199	24.62%
Current Sensing Devices (CSDs)	90	1,261	7.14%

<sup>&</sup>lt;sup>9</sup> ReliabilityFirst originally identified a potential noncompliance with PRC-005-6 R3; however, further investigation revealed instances involving insufficient evidence of maintenance and testing records under PRC-005-1.1b. Therefore, this violation references PRC-005-1.1b because it was the version of the Reliability Standard in effect at the time the earliest instance of this violation began. However, the referenced audit and extent of condition review involved 325 instances of noncompliance spanning both versions of PRC-005 (i.e., PRC-005-1.1b and PRC-005-6).

<sup>&</sup>lt;sup>10</sup> Specific examples of the issues identified during the audit include: (1) a missed testing interval (Belle River Unit #1, Component Z-51-E CTs); (2) a failure to perform specific trip path tests (Fermi CTG 11 DC Control, Component 86T [MC12]); (3) missing test records for a component that the entity believes it tested (Monroe Unit #3, DC Control, Component 1BR69); (4) a missed component during periodic testing (Pluto, UFLS, Component B81 PTs); and (5) a failure to test PTs at Belle River Unit #1 (Component A59), Fermi Unit #2 (Component 21-ST), Monroe Unit #4 (Component 21-ST), Northeast CTG 12 (Component 51V-2), and St. Clair Unit #6 (Component RAGUA).

Direct Current (DC) Control	67	1,304	5.14%	
Communication	8	18	44.44%	
DC Power	0	285	0.00%	
Total	325	4,875	6.67%	

- 47. There were several root causes of these violations that, collectively, point to a program failure. The root causes include: (a) incomplete and inaccurate equipment inventory records; (b) running parallel systems to track testing that were both ineffective, including a cumbersome physical filing system and an incomplete electronic system; (c) a multi-year backlog of unchecked test records; (d) a failure to include certain components in its maintenance and testing program; and (e) a failure to fully understand applicable standards and requirements.
- 48. This violation implicates the management practices of grid maintenance and information management. Grid maintenance was involved due to the entity's failure to ensure equipment reliability and resilience by proactively monitoring, maintaining, and testing equipment. Information management was involved because of the entity's failure to effectively manage its maintenance and testing records, which resulted in numerous lost, missing, or unchecked records. This violation highlights the importance of implementing processes, internal controls, and technology to manage and ensure the integrity and availability of information.
- 49. The violation began on November 25, 2013, when DTE failed to comply with PRC-005-1.1b and is scheduled to end by December 15, 2019, which is the completion date for the ongoing Mitigation Plan.
- 50. ReliabilityFirst determined that the violation posed a serious and substantial risk to the reliability of the BPS based on the following factors.<sup>11</sup> Neglecting to maintain and test Protection System devices could lead to device malfunction, premature or undetected device failure, and Protection System misoperation. Protection System issues could have significant consequences related to equipment damage and power system performance (e.g., generating unit or system instability, unacceptable loss of load or generation, cascading, or uncontrolled system separation). In this case, the scope (6.67%) and variety of issues and causes exacerbated the risk, as they evidenced a programmatic failure. This violation involved poor record management and an overall lack of oversight and control in the entity's maintenance and testing program, which increased the likelihood of the entity

<sup>&</sup>lt;sup>11</sup> The earliest instance implicates PRC-005-1.1b R2.1 and R2.2, which have a VRF of "High" pursuant to the VRF Matrix. According to the VSL Matrix, this violation warranted a "Lower" VSL.

experiencing device malfunction, premature or undetected device failure, or misoperation. No harm is known to have occurred.

#### **Mitigating Actions**

- 51. On August 14, 2018, DTE submitted to ReliabilityFirst a Mitigation Plan to address the Violation of PRC-005-6 R3. *See* RFCMIT013607-1, **Attachment F**. On August 14, 2018, ReliabilityFirst accepted the Mitigation Plan.
- 52. In the Mitigation Plan, DTE committed to take the following actions by December 15, 2019. DTE performed testing and maintenance on BES Protection System Components at the following locations: Pluto; Northeast CTGs; Monroe Unit #4; Trenton Channel Unit #9; Fermi Unit #2; Belle River Unit #1; River Rouge Unit #3; St. Clair Unit #6; Monroe Unit #1; St. Clair Unit #7; Fermi CTG 11s; Belle River Unit #2; St. Clair Unit #2; St. Clair Unit #3; Greenwood Unit #1; Monroe Unit #2; St. Clair Unit #1; and Monroe Unit #3. DTE provided periodic updates on the testing completion status and performed required testing on newly identified issues as required. DTE also committed to taking the following actions. DTE documented a component inventory of BES protection components and completed an initial review of the inventory. DTE created process documentation for an asset management system to assist in maintaining accurate information going forward. DTE migrated its Protection System Component list into its Maximo work management system and delivered work management system training for those who require training.
- 53. DTE shall certify and provide evidence demonstrating the completion of the Mitigation Plan to ReliabilityFirst. ReliabilityFirst will verify DTE's completion of the Mitigation Plan.



Attachment A to the Settlement Agreement

DTE's Self-Report for PRC-005-1 R2 dated April 17, 2007

**RELIABILITY | RESILIENCE | SECURITY** 

#### Self Report

Entity Name: DTE Electric Company (DTEE)

NERC ID: NCR00753 Standard: PRC-005-1 Requirement: PRC-005-1 R2. Date Submitted: April 17, 2017

Has this violation previously No been reported or discovered?:

# Entity Information:

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

> Contact Name: Karie L. Barczak Contact Phone: 3132353808 Contact Email: Karie.Barczak@DTEEnergy.com

## Violation:

Violation Start Date: June 18, 2007 End/Expected End Date: July 21, 2017

Reliability Functions: Generator Owner (GO)

Is Possible Violation still Yes occurring?:

Number of Instances: 4

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and No comprehensive protection scheme maintenance has been performed on Cause of Possible Violation: the Enrico Fermi Nuclear Power Plant (ENFPP) CTG 11-1 through 11-4 since the late 1990s. Distribution Operations (DO) Engineering discovered the Potential Violation during the ENFPP's refueling outage package review. Initially ENEPP's maintenance system coded the relaying maintenance as

Initially ENFPP's maintenance system coded the relaying maintenance as corrective, not as needed ongoing preventative maintenance.

The root cause of the Possible Violation was neither ENFPP or Distribution Operations Engineering group scheduled the maintenance.

#### Mitigating Activities:

Description of Mitigating Perform the required generator relay maintenance on ENFPP CTG 11-1, 11-2, Activities and Preventative 11-3 and 11-4.

Measure:

Peaker relay maintenance will be added to Maximo, DTE's work management system.

Self Report

Date Mitigating Activities Completed:

# Impact and Risk Assessment:

Potential Impact to BPS: Minimal Actual Impact to BPS: Minimal

Description of Potential and Attached to the 120 kV switchyard are four (4) 18,824 kVA Combustion Actual Impact to BPS: Turbine Generators (CTG's 11-1 through 11-4) used for emergency peaking power. CTG 11-1 however is designated as the Fermi 2 Nuclear Power Plant Alternate AC (AAC) source.

Risk Assessment of Impact to Minimal risk as CTG 11-1 is dedicated to plant while the other three peakers BPS: are designated as emergency use only.

Additional Entity Comments: None

	Additional Comments			
From	Comment	User Name		
No Comments				

Additional Documents							
From	Document Name	Description	Size in Bytes				
No Docume	No Documents						





DTE's Mitigation Plan designated as RFCMIT012859 for PRC-005-1 R2 submitted May 2, 2017

**RELIABILITY | RESILIENCE | SECURITY** 

# ATTACHMENT B

# **Mitigation Plan**

#### Mitigation Plan Summary

Registered Entity: DTE Electric Company

Mitigation Plan Code: Mitigation Plan Version: 1

NERC Violation ID	Requirement	Violation Validated On	
RFC2017017450	PRC-005-1 R2.		

Mitigation Plan Submitted On: May 02, 2017 Mitigation Plan Accepted On: Mitigation Plan Proposed Completion Date: July 21, 2017 Actual Completion Date of Mitigation Plan: Mitigation Plan Certified Complete by DTEE On: Mitigation Plan Completion Verified by RF On: Mitigation Plan Completed? (Yes/No): No

#### Compliance Notices

Section 6.2 of the NERC CMEP 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 B.

(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 or recommended to the applicable governmental authorities 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.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) 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 alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) 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.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Entity Information

Identify your organization:

Entity Name: DTE Electric Company

NERC Compliance Registry ID: NCR00753

Address: One Energy Plaza Detroit MI 48226

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Karie L. Barczak Title: Regulatory Compliance Consultant Email: Karie.Barczak@DTEEnergy.com Phone: 313-235-3808

#### Violation(s)

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

Violation ID	Date of Violation	Requirement			
Requirement Description					
RFC2017017450 06/18/2007 PRC-005-1 R2.					
Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each					

Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

No comprehensive protection scheme maintenance has been performed on the Enrico Fermi Nuclear Power Plant (ENFPP) CTG 11-1 through 11-4 since the late 1990s. Distribution Operations (DO) Engineering discovered the Potential Violation during the ENFPP's refueling outage package review.

Relevant information regarding the identification of the violation(s):

Initially ENFPP's maintenance system coded the relaying maintenance as corrective, not as needed ongoing preventative maintenance.

#### Plan Details

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 violation(s) identified above in Section C.1 of this form:

Perform the required generator relay maintenance on ENFPP CTG 11-1, 11-2, 11-3 and 11-4.

Peaker relay maintenance will be added to Maximo, DTE's work management system.

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:

Proposed Completion date of Mitigation Plan: July 21, 2017

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

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Add peaker relay maintenance into work management system	Add peaker relay maintenance into Maximo, DTE's work management system	05/26/2017			No
Perform the required maintenance on the peaker relays	Perform the required generator relay maintenance on ENFPP CTG 11-1, 11-2, 11-3 and 11-4.	07/07/2017			No

Additional Relevant Information

#### Reliability Risk

#### Reliability Risk

While the Mitigation Plan is being implemented, 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 known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

There is minimal risk to the BPS as the three of the peakers are used as emergency power. The fourth peaker (CTG 11-1) is designated as for plant use only.

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Further violations will be prevented by populating the corporate work management system with the peaker relays. In doing so, it will be ensured that continuing maintenance will be scheduled.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

# ATTACHMENT B

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

DTE Electric Company Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Karie L. Barczak

Title: Regulatory Compliance Consultant

Authorized On: May 02, 2017



Attachment C to the Settlement Agreement

DTE's Certification of Mitigation Plan Completion for PRC-005-1 R2 dated September 15, 2017

**RELIABILITY | RESILIENCE | SECURITY** 

## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The 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:	DTE Electric Company
NERC Registry ID:	NCR00753
NERC Violation ID(s):	RFC2017017450
Mitigated Standard Requirement(s):	PRC-005-1 R2.
Scheduled Completion as per Accepted Mitigation Plan:	October 13, 2017
Date Mitigation Plan completed:	September 15, 2017
RF Notified of Completion on Date:	September 15, 2017
Entity Comment:	The four Fermi peaker protective relays have been tested and ongoing maintenance submitted. Both milestones have been completed.

Additional Documents					
From	Document Name	Description	Size in Bytes		
Entity	ENFPP CTG 11-1 relay - complete.pdf	Completed ENFPP CTG 11-1 relay maintenance package	1,838,730		
Entity	ENFPP CTG 11-2 relay - complete.pdf	Completed ENFPP CTG 11-2 relay maintenance package	1,516,946		

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

Name: Karie L. Barczak

Title: Regulatory Compliance Consultant

Email: Karie.Barczak@DTEEnergy.com

Phone: 1 (313) 235-3808

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)



## Attachment D to the Settlement Agreement

ReliabilityFirst's Verification of Mitigation Plan Completion for PRC-005-1 R2 dated October 11, 2017

**RELIABILITY | RESILIENCE | SECURITY** 



## Mitigation Plan Verification for RFC2017017450

## DTE Electric Company ("DTE")

## Standard/Requirement: PRC-005-1 R2

## NERC Mitigation Plan ID: RFCMIT012859

Method of Disposition: Not yet determined

Relevant Dates						
Initiating Document	Mitigation Plan Submittal	RF Acceptance	NERC Approval	Certification Submittal	Date of Completion	
Self-Report 04/17/17	05/02/17	05/05/17	06/09/17	09/15/17	09/15/17	

#### **Description of Issue**

No comprehensive protection scheme maintenance has been performed on the Enrico Fermi Nuclear Power Plant (ENFPP) CTG 11-1 through 11-4 since the late 1990s. Distribution Operations (DO) Engineering discovered the Potential Violation during the ENFPP's refueling outage package review.

Evidence Reviewed					
File Name	Description of Evidence	Standard/Req.			
File 1	CTG-11-1- Protective Relaying Work Plan	PRC-005-1 R2			
File 2	CTG 11-2- Protective Relaying Work Plan	PRC-005-1 R2			
File 3	File 3 CTG 11-4- Protective Relaying Work Plan				
File 4	ENFPP CTG 11- MAXIMO PM Request-	PRC-005-1 R2			
	MILESTONE 1				
File 5	ENFPP CTG 11-1 relay-complete	PRC-005-1 R2			
File 6	File 6 ENFPP CTG 11-2 relay-complete				
File 7	File 7 ENFPP CTG 11-3 relay-complete				
File 8	ENFPP CTG 11-4 relay-complete	PRC-005-1 R2			



	Evidence Reviewed				
File Name	Description of Evidence	Standard/Req.			
File 9	Ongoing Preventative Maintenance ENFPP- CTG 11	PRC-005-1 R2			

#### **Verification of Mitigation Plan Completion**

*Milestone 1:* Add peaker relay maintenance into work management system.

File 9, "Ongoing Preventative Maintenance-ENFPP-CTG 11", consists of the peaker relay maintenance work orders entered into Maximo.

Milestone #1 Completion verified

*Milestone 2:* Perform the required maintenance on the peaker relays.

File 5, "*ENFPP CTG 11-1 relay – complete*", File 6, "*ENFPP CTG 11-2 relay – complete*", File 7, "*ENFPP CTG 11-3 relay – complete*", and File 8, "*ENFPP CTG 11-4 relay –* complete" consist of the completed work orders dated September 1, 2017, May 25, 2017, and April 24, 3017, respectively.

Milestone # 2 Completion verified

The Mitigation Plan is hereby verified complete.

Date: October 11, 2017

tony Jungar

Tony Purgar Manager, Risk Analysis & Mitigation ReliabilityFirst Corporation







ReliabilityFirst's Potential Noncompliance Identification Form for PRC-005-1.1b R2 dated December 29, 2017



Contains Confidential Information Including Privileged and Critical Energy Infrastructure Information. Do Not Distribute.

## Potential Noncompliance (PNC) Identification Form

This document is to be completed upon identification of a possible violation, typically within 5 business days of the audit exit brief, and emailed to the Paralegals, Director of Compliance Monitoring, Manager of Ops & Planning Monitoring <u>or</u> Manager of CIP Monitoring, and Director of Enforcement.

Upon receipt of this document, Enforcement will coordinate with the reporting auditor and Enforcement to initiate the Enforcement processing of this possible violation.

Reported By:	Kellen Phillips [RF]
Submittal Date:	December 29, 2017
Registered Entity(s):	DTE Electric Company
Compliance Monitoring Process:	O&P Audit Off-Site
PNCs Identified:	1

PRC-005-6 R3	Changed to PRC-005-1.1b R2						
Registered Entity(s):	DTEE						
NERC ID(s)	NCR00753						
Registered Function(s) in Noncompliance: GO; DP							
Initial PNC Date (Actu	Initial PNC Date (Actual Date Discovered by RF): December 07, 2017						
Date for Determination	on of Penalty/Sanction (Beginning Date of Violation):	January 1, 2016	Changed to				
End Date of PNC:	NA		November 25, 2013				

Violation Risk Factor:	High
Violation Severity Level:	Severe
Management Practices Impacted:	Grid Maintenance (GMAINT)
Candidate for CE/FFT Treatment?	Neither (moderate to severe risk)

#### **Standard and Requirement**

PRC-005-6 R3. Each Transmission Owner, Generator Owner, and Distribution Provider that utilizes time based maintenance programs(s) shall maintain its Protection System, Automatic Reclosing, and Sudden Pressure Relaying Components that are included within the time-based maintenance program in accordance with the minimum maintenance activities and maximum maintenance intervals prescribed within Tables 1-1 through 1-5, Table 2, Table 3, Table 4-1 through 4-3, and Table 5.



# Contains Confidential Information Including Privileged and Critical Energy Infrastructure Information. Do Not Distribute.

#### **Basis, Facts and Evidence pertaining to the PNC**

A Potential Non-Compliance was identified for PRC-005-6 R3. These issues were brought to the audit team's attention in an email from Jeffrey DePriest, Manager of NERC Compliance for DTE Electric Company on October 13, 2017. The audit team reviewed the submittals from DTEE and confirmed that the following nine samples did not meet the conditions of PRC-005-6:

- 1) Index 3: Belle River Unit #1, Component Z-51-E CTs The component was tested in 2008 and again in 2016 but the component should have been tested again prior to 2013 under PRC-005-1.1b per the DTEE PSMP. DTE stated that is was scheduled to be tested in 2011 but it was not done.
- 2) Index 17: Fermi CTG 11 DC Control, Component 86T(MC12) Protection testing was performed in 2017 under PV# RFC2017017450. While compiling data for this audit it was discovered that a trip path test for CTG 11-1 and 11-2 breakers was not completed as required as part of a mitigation plan for a previous violation. DTE previously certified that it completed mitigation and ReliabilityFirst reviewed and verified the evidence of completion. While the evidence was sufficient for verification, it was not evident at the time that DTE did not complete this specific trip path test.
- 3) Index 22: Monroe Unit #3, DC Control, Component 1BR69 Required testing is believed to have been completed in 2015 but DTEE is unable to locate the testing records demonstrating that testing was completed.
- 4) Index 28: Pluto, UFLS, Component B81 PTs Required testing for this component was not completed in 2015 when all other testing was performed. The component was commissioned in 2006. Under PRC-005-1.1b, required testing should have been completed by 2016 under PRC-005-1.1b. PRC-005-6, table 3, Row 2 lists the maximum interval at twelve years, therefore the next due date is 2018.
- 5) Index 2, 13, 24, 26, and 32: PTs at Belle River Unit #1 (Component A59), Fermi Unit #2 (Component 21-ST), Monroe Unit #4 (Component 21-ST), Northeast CTG 12 (Component 51V-2) and St Clair Unit #6 (Component RAGUA) – Testing was not done due to a DTEE misunderstanding for required PT testing.

These issues were discovered by DTE during the audit due to RFs sample request. Rather than requesting additional samples, ReliabilityFirst and DTE determined that DTE would conduct an extensive review of all protection system components. Accordingly, more compliance issues could be expected.

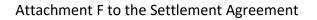
#### Mitigating Activities by the Entity:

- Items 1, 2, 3, and 5 require coordinated outages so there is no timetable yet for completion of this testing.
- According to DTE Item 4 will be done as soon as possible.
- DTE will submit a formal Mitigation Plan.

#### **Risk:**

Due to the quantity (9/33 samples) and varying nature (lost records, missed schedules, not understanding the standard) of the compliance issues found, the audit team considers this PNC high risk to the BES. DTE has had at least five PRC-005 compliance issues since 2012 in addition to these new findings. Thorough follow up is needed to help DTE improve their PRC-005 compliance program and controls.





DTE's Mitigation Plan designated as RFCMIT013607-1 for PRC-005-6 R3 submitted August 14, 2018

**RELIABILITY | RESILIENCE | SECURITY** 

## **Mitigation Plan**

Mitigation Plan Summary

Registered Entity: DTE Electric Company

Mitigation Plan Code:

Mitigation Plan Version: 2

NERC Violation IDRequirementViolation Validated OnRFC2018018988PRC-005-6 R3.Changed to PRC-005-1.1b R2

Mitigation Plan Submitted On: August 14, 2018 Mitigation Plan Accepted On:

Mitigation Plan Proposed Completion Date: December 15, 2019

Actual Completion Date of Mitigation Plan:

Mitigation Plan Certified Complete by DTEE On:

Mitigation Plan Completion Verified by RF On:

Mitigation Plan Completed? (Yes/No): No

#### **Compliance Notices**

Section 6.2 of the NERC CMEP 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 B.

(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 or recommended to the applicable governmental authorities 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.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) 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 alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) 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.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### **Entity Information**

Identify your organization:

Entity Name: DTE Electric Company

NERC Compliance Registry ID: NCR00753 Address: One Energy Plaza

Detroit MI 48226

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jeffrey W. DePriest Title: Manager-NERC Compliance Email: depriestj@dteenergy.com Phone: 313-235-5521

#### Violation(s)

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

Violation ID	Date of Violation	Requirement			
Requirement Description					
RFC2018018988	01/01/2016	PRC-005-6 R3.			

Each Transmission Owner, Generator Owner, and Distribution Provider that utilizes time-based maintenance program(s) shall maintain its Protection System, Automatic Reclosing, and Sudden Pressure Relaying Components that are included within the time-based maintenance program in accordance with the minimum maintenance activities and maximum maintenance intervals prescribed within Tables 1-1 through 1-5, Table 2, Table 3, Table 4-1 through 4-3, and Table 5.

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

A Potential Non-Compliance was identified for PRC-005-6 R3 during the 2017 693 audit. The audit team reviewed the submittals from DTEE and confirmed that nine samples did not meet the conditions of PRC-005-6.

Please see information below regarding the expanded root cause of the PRC-005-6 R3 audit PV.

1. It was assumed that by bringing together all Equipment Records (Not Test Records), that would constitute our component list. Think of this as having our component list spread across thousands of pieces of paper. Underlying problem with that assumption was that the Equipment Records were actually incomplete and inaccurate.

2. Knowing what to test was based on the physical location of the Equipment Records. The old process depended upon the techs going into a particular set of filing cabinets, and grabbing all records associated with the position to be tested. Once Engineering moved, and was given far less space for files, the electronic version of this system was not properly completed and the new physical version was inadequate.

3. There was a Test Record checking backlog of multiple years, for Relay Performance Engineering.

4. It was assumed Rotating Performance was testing PTs properly, also AVRs, Peaker PTs and some permissive relays were not included as BES components on any list, scheme or otherwise.

5. 2014 BES Component definition change from RF (regional) to NERC. Heart of the change was "anything that tripped BES" became "anything that was protecting BES". Relay Performance struggled for 2+ years on what the impact to our schemes, and components were.

Note, the creation of the BES Component list has already addressed 1, 4 and 5 directly. Item 2 will be addressed with the new Asset Management system, more specifically the new test forms and checklist that will be rolled out in the next month.

Relevant information regarding the identification of the violation(s):

These issues were brought to the audit team's attention in an email from Jeffrey DePriest on October 13, 2017. These issues were discovered by DTE during the development of the BES Component List concurrently with the audit . Rather than requesting additional samples, Reliability First and DTE determined that DTE would conduct an extensive review of all protection system components.

#### Plan Details

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 violation(s) identified above in Section C.1 of this form:

- 1. Perform testing on Belle River Unit #1
- 2. Perform testing on Belle River Unit #2
- 3. Perform testing on St Clair Unit #1
- 4. Perform testing on St Clair Unit #2
- 5. Perform testing on St Clair Unit #3
- 6. Perform testing on St Clair Unit #6
- 7. Perform testing on St Clair Unit #7
- 8. Perform testing on Greenwood Unit #1
- 9. Perform testing on River Rouge Unit #3
- 10. Perform testing on Trenton Channel Unit #9
- 11. Perform testing on Fermi 2
- 12. Perform testing on Fermi CTGs
- 13. Perform testing on Monroe Unit #1
- 14. Perform testing on Monroe Unit #2
- 15. Perform testing on Monroe Unit #3
- 16. Perform testing on Monroe Unit #4
- 17. Perform testing on Pluto
- 18. Perform testing on Northeast CTGs
- 19. Complete BES Protection System Component List initial review.
- 20. Perform testing on all remaining untested components discovered during creation of the BES Protection Component List.
- 21. Create process documentation for asset management system.
- 22. Deliver training on use of asset management system.
- 23. Migrate Protection System Component list into Maximo work management system.

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:

Proposed Completion date of Mitigation Plan: December 15, 2019

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

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Perform testing at Pluto	Perform testing on BES Protection System Components at Pluto as required.	03/30/2018	10/22/2017		No
Perform testing on	Perform testing on	03/30/2018	12/18/2017		No

## ReliabilityFirst Confidential Non-Public Information

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
the Northeast CTGs	BES Protection System Components on the Northeast CTGs as required.				
Complete BES Protection System Component List initial review	Document Component Inventory for BES protection components.	03/31/2018	02/06/2018	The Initial BES Protection System Component List Review has been completed as of 2/6/2018. See note under additional information.	No
Perform testing at Monroe Unit #4	Perform testing on BES Protection System Components at Monroe Unit #4 as required.	06/01/2018	05/11/2018	Monroe Unit 4 testing was completed on 5/11/18.	No
Perform testing at Trenton Channel Unit #9	Perform testing on BES Protection System Components at Trenton Channel Unit #9 as required.	06/15/2018	06/01/2018	Testing at Trenton Channel Unit 9 was completed on 6/1/18.	No
Provide update on testing completion status	Provide update on testing completion status. (this milestone was added to get the application to accept the mitigation plan)	09/03/2018			No
Perform testing on Fermi Unit #2	Perform testing on BES Protection System Components at Fermi Unit #2 as required.	11/23/2018			No
Perform testing on Belle River Unit #1	Perform testing on BES Protection System Components at Belle River Unit #1 as required.	11/30/2018			No
Perform testing on River Rouge Unit #3	Perform testing on BES Protection System Components	11/30/2018		Outage moved out to 11/30/18- proposed completion date was	No

## ReliabilityFirst Confidential Non-Public Information

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
	at River Rouge Unit #3 as required.			adjusted to reflect outage time frame change.	
Perform testing at St Clair Unit #6	Perform testing on BES Protection System Components at St Clair Unit #6 as required.	12/14/2018			No
Perform testing at Monroe Unit #1	Perform testing on BES Protection System Components at Monroe Unit #1 as required.	12/21/2018			No
Perform testing at St Clair Unit #7	Perform testing on BES Protection System Components at St Clair Unit #7 as required.	12/21/2018			No
Create process documentation for asset management system.	Create process documentation for asset management system to assist in maintaining accurate information going forward.	12/28/2018			No
Perform testing on Fermi CTG 11s	Perform testing on BES Protection System Components on the Fermi CTG 11s as required.	01/21/2019			No
Perform testing at Belle River Unit #2	Perform testing on BES Protection System Components at Belle River Unit #2 as required.	03/08/2019			No
Perform testing at St Clair Unit #2	Perform testing on BES Protection System Components at St Clair Unit #2 as required.	03/22/2019			No
Perform testing at St	Perform testing on	03/29/2019			No

## ReliabilityFirst Confidential Non-Public Information

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Clair Unit #3	BES Protection System Components at St Clair Unit #3 as required.				
Migrate Protection System Component list into Maximo work management system.	Migrate Protection System Component list into Maximo work management system. Transfer protection component items from excel into Maximo.	04/15/2019			No
Deliver work management system training	Deliver work management system training for those who require training.	04/30/2019			No
Perform testing at Greenwood Unit #1	Perform testing on BES Protection System Components at Greenwood Unit #1 as required.	06/01/2019			No
Perform testing at Monroe Unit #2	Perform testing on BES Protection System Components at Monroe Unit #2 as required.	06/01/2019			No
Perform testing at St Clair Unit #1	Perform testing on BES Protection System Components at St Clair Unit #1 as required.	07/01/2019			No
Provide update on testing completion status	Provide update on testing completion status. (this milestone was added to get the application to accept the mitigation plan)	09/25/2019			No
Perform required testing on newly identified issues.	While creating the system protection component list, there were many newly identified issues discovered. Perform	12/15/2019			No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
	required testing on newly identified issues as required.				
Perform testing on Monroe Unit #3	Perform testing on BES Protection System Components at Monroe Unit #3 as required.	12/15/2019			No

Additional Relevant Information

If additional areas of concern are discovered, these issues will be brought to the addition of Reliability First and corrected as soon as possible.

The mitigation plan dates are based on planned outages that are of adequate duration to accomplish the mitigation testing. DTE does have some limited opportunities to accomplish testing earlier than the dates provided. These are very short duration outages such as boiler cleaning outages that are prone to late cancellations or shifting schedules as opposed to the normal long duration maintenance outages that have more stable schedules. These possible opportunities have not yet been vetted with the individual plants for the degree of certainty that they will occur and for crew availability to perform the work. For these types of outages, the vetting must be done closer to the expected start of the outage.

- Belle River Unit 1 has a Fall (Sept '18) and Winter (Jan '19) boiler cleaning prior to its periodic maintenance outage next spring.
- Belle River Unit 2 has a Summer (Aug '18) and Fall (Dec '18) boiler cleaning prior to Winter boiler cleaning.
- Monroe Unit 2 has a Summer Recovery Outage (Oct '18) prior to its Catalyst outage next Spring.

• Monroe Unit 3 has two Summer Readiness Outages (DEC '18 and May '19) prior to its periodic maintenance outage fall of '19.

Note: DTE performed a comprehensive review across its whole system to create a BES Protection System Component List. First, using consultants and starting with DTE's BES Scheme List, they went through each location and scheme to identify all BES Components. To do this, they reviewed test records, equipment records, drawings, pictures, work orders, requests for shutdowns, etc. Once identified and verified with two pieces of evidence, the component would be added to the list. During this time, any test date information was identified and associated with the component.

Next, DTE's most experienced SMEs would review the lists and check for missed components or any other errors. In addition, the consultants would identify specific questions or topics for review with the SMEs with an Issues Log. In doing this comprehensive review, and based on the SME's specific knowledge of each site, DTE insured that no components were missed. This effort was a comprehensive review across the whole system, whereas reviews for previous mitigation efforts were focused on specific circumstances. The BES Protection System Component List was compiled at the "component" level versus the more broadly defined "scheme" level which DTE previously used to track compliance.

#### Reliability Risk

#### Reliability Risk

While the Mitigation Plan is being implemented, 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 known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

RF 2017 693 audit report states: Due to the quantity (9/33 samples) and varying nature (lost records, missed schedules, not understanding the standard) of the compliance issues found the audit team considers this PNC high risk to the BES. DTE has had at least five PRC-005 compliance issues since 2012 in addition to these new findings. Thorough follow up is needed to help DTE improve their PRC-005 compliance program and controls.

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

With the creation of the protection component list, tracking individual component testing can be more exact (compared to testing per scheme). Once the individual components are entered into the Maximo work management system, test schedules will be more visible and test completion tracking will be improved.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

DTE Electric Company Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Jeffrey W. DePriest

Title: Manager-NERC Compliance

Authorized On: January 22, 2018





DTE's Certification of Mitigation Plan Completion for PRC-005-1.1b R2 dated December 13, 2019

**RELIABILITY | RESILIENCE | SECURITY** 

## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The 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: DTE Electric Company NERC Registry ID: NCR00753 NERC Violation ID(s): RFC2018018988 Mitigated Standard Requirement(s): PRC-005-1.1b R2. Scheduled Completion as per Accepted Mitigation Plan: December 15, 2019 Date Mitigation Plan completed: December 13, 2019 RF Notified of Completion on Date: December 13, 2019

Entity Comment: DTEE has completed all mitigation plan milestones.

Additional Comments			
From	Comment	User Name	
Entity	DTE Electric (DTEE) expects to have all milestones completed by 12/15/19.	Danielle Daugherty	

	Additional Documents				
From	Document Name	Description	Size in Bytes		
Entity	012618_BLRPP Unit 1 Z-51-E CT NEAST CTG 12 51V-2 PT PLUTO B81 PT.pdf	BLRPP Unit 1 Z-51-E CT relay test record NEAST CTG 12 51V-2 PT relay test record PLUTO B81 PT relay test record	174,785		
Entity	032918_PRC-005 PNC Categorization 032918.pdf	Protection Component list PNC Categorization	192,781		
Entity	040318_DTE PRC-005 COMPONENT INVENTORY MASTER -RF 20180402_highlighted.pdf	Protection System Component list with highlighting	4,826,653		
Entity	040318_DTE PRC-005 COMPONENT INVENTORY MASTER -RF 20180402_highlighted.xlsx	Excel version of DTEE Protection System Component List	303,522		
Entity	083118_PNC081_PRC- 005_MP key milestone update evidence.pdf	DTEE confirmation of testing completed to date for milestone due 9/3/18.	57,017		
Entity	112618_email confirmation for Fermi relay testing.pdf	DTEE confirmation of relay testing completion at Fermi for milestone due 11/23/18.	72,511		
Entity	121018_RRGPP Unit 3 Mitigation complete.pdf	Email from DTEE Business Unit stating all mitigating work at RR3 is complete as of 12/10/18.	36,822		

Additional Documents					
From	Document Name	Description	Size in Bytes		
Entity	121718_STCPP Unit 6 Mitigation.pdf	Internal DTEE email verification of SC6 testing completion.	58,836		
Entity	121818_MONPP U1 Mitigation complete email verification.pdf	Mitigation work on MON1 has been completed- email verification from business unit SME.	36,698		
Entity	122718_Mitigation Plan MilestoneComplete_email verification from BU_process doc.pdf	DTEE Business Unit SME email verification that process documentation task has been completed.	36,792		
Entity	010719_PRC005-6 Executive Summary for BES components in Maximo V2.pdf	Process documentation for asset management system -Executive Summary for BES components in Maximo	151,585		
Entity	010719_NERC BES Relay Protection System Process Flow.pdf	Process documentation for asset management system -NERC BES Relay Protection System Process Flow	65,668		
Entity	010719_DTE PRC-005-6 Component Inventory Integration Plan A-3.pdf	Process documentation for asset management system -Component Inventory Integration Plan	266,371		
Entity	010719_DTE PRC-005-6 Component Inventory Conversion PlanA7.pdf	Process documentation for asset management system - Component Inventory Conversion Plan	495,543		
Entity	012419_STCPP Unit 7 Mitigation_email verification of completion.pdf	SC7 email verification of completion	36,376		
Entity	030719_NERC BES Relay Protection System Process Flow.pdf	Relay and battery protection system process flow diagram	65,668		
Entity	030719_BES Maintenance Process Flow - Version 2.pdf	BES maintenance process flow diagram	134,417		
Entity	042219_Greenwood Unit 1verification of complete email.pdf	Mitigation Plan Milestone for Greenwood Unit #1 was complete as of 3/29/19 verification email	43,152		
Entity	042919_Using Maximo for Bulk Electric System (BES) Assets - FINAL.pdf	Training presentation- Using Maximo for Bulk Electric System (BES) Assets	1,786,972		
Entity	042919_PRC- 005_Using_Maximo_BES_Ass ignment_Completion_Report_ 4-26-2019.xls	Maximo Training- PRC-005 Using Maximo BES assignment completion report	34,816		
Entity	051418_STCPP Unit 2 Mitigation complete email verification.pdf	STCPP Unit 2 Mitigation is completed as of 10/25/18 email verification.	43,050		
Entity	052019_STCPP U3 Mitigation is complete email verification.pdf	STCPP U3 Mitigation is complete as of 5/13/2019 verification email.	42,209		

	Additional Documents				
From	Document Name	Description	Size in Bytes		
Entity	052419_PRC-005 MONPP U2 Mitigation Complete email confirmation.pdf	Email confirmation stating PRC-005 MONPP U2 mitigation is complete as of 5/23/19.	42,353		
Entity	053119_ PRC-005-6 R3 mitigation milestone for BR unit 2_email verification of complete.pdf	Mitigation milestone for BR unit 2_email verification of complete	117,013		
Entity	061719_PRC-005 Mitigation for BLRPP Unit 1 email confirmation of complete.pdf	PRC-005 mitigation is complete for BLRPP Unit 1 as of 4/12/19. Email confirmation from DTEE business unit SME.	85,835		
Entity	061719_PRC-005 Fermi CTG 11s Mitigation complete_email confirmation.pdf	PRC-005 Fermi CTG 11s Mitigation complete_email confirmation	111,644		
Entity	062819_PRC-005 mitigation milestone for SC1_verification of complete email from SME.pdf	PRC-005 mitigation milestone for SC1_verification of complete email from SME.	117,478		

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

Name: Karie Barczak

Title: Regultory Compliance Consultant

Email: karie.barczak@dteenergy.com

Phone: 1 (313) 235-3808

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)