

134 FERC ¶ 61,209  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;  
Marc Spitzer, Philip D. Moeller,  
John R. Norris, and Cheryl A. LaFleur.

North American Electric Reliability Corporation

Docket No. NP10-18-000

ORDER ON REVIEW OF NOTICE OF PENALTY

(Issued March 17, 2011)

1. On February 26, 2010, pursuant to section 215(e)(2) of the Federal Power Act (FPA),<sup>1</sup> and section 39.7(e)(1) of the Commission's regulations,<sup>2</sup> the Commission initiated, on its own motion, a review of a notice of penalty (Notice) in which the North American Electric Reliability Corporation (NERC), in its capacity as the Commission-designated Electric Reliability Organization (ERO), proposes to assess an \$80,000 penalty against a registered entity, Turlock Irrigation District (Turlock).<sup>3</sup> NERC proposes this penalty pursuant to a settlement agreement between Turlock and its Regional Entity, WECC, that addresses alleged violations of requirements of eight Commission-approved Reliability Standards. In the February 26 Order, the Commission focused its review on an alleged violation by Turlock of Reliability Standard FAC-003-1 Requirement R2.<sup>4</sup> This alleged violation relates to a vegetation-caused outage of

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<sup>1</sup> 16 U.S.C. § 824o(e)(2) (2006).

<sup>2</sup> 18 C.F.R. § 39.7(e)(1) (2010).

<sup>3</sup> *North American Electric Reliability Corporation*, 130 FERC ¶ 61,151 (2010) (February 26 Order). The Notice recounts that as of June 17, 2007, the date on which Commission-approved Reliability Standards became mandatory within the continental United States, the Western Electricity Coordinating Council (WECC) had registered Turlock as, among other reliability functions, a Balancing Authority, Transmission Owner, and Transmission Operator. Notice at 1 n.3.

<sup>4</sup> FAC-003-1 R2 requires an entity registered as a Transmission Owner, such as Turlock, to create and implement an annual plan for vegetation management. Under R2, "the plan shall describe the methods used, such as manual clearing, mechanical clearing,

(continued...)

transmission facilities on August 29, 2007, which led to a loss of firm load in the service areas of Turlock and a neighboring registered entity, Modesto Irrigation District (Modesto).

2. In this order, the Commission affirms the penalty in the Notice on its particular facts as an exercise of WECC's discretion to assess a penalty relating in part to an alleged violation of FAC-003-1 R2 that took place during the "initial period" after that requirement became effective on June 18, 2007, through December 31, 2007. To provide notice to the industry, NERC, and the Regional Entities of principles that will guide our future determinations in reviews of notices of penalty, we discuss the issues raised in the February 26 Order and commenters' responses. We direct WECC to conduct spot checks for the purpose of testing continued compliance by Turlock and, if appropriate, Modesto, with several Reliability Standards relating to the events leading up to the loss of load in this matter.

### **I. Background**

3. On November 13, 2009, NERC filed the Notice in Docket No. NP10-18-000 in which it proposes the \$80,000 penalty against Turlock.<sup>5</sup> The proposed penalty addresses alleged violations of Reliability Standards TPL-001-0 R1, TPL-002-0 R1, TPL-003-0 R1, TPL-004-0 R1, COM-002-2 R2, PER-002-0 R3, VAR-001-1 R3, and FAC-003-1 R2.

4. In the Notice, NERC states that on August 30, 2007, Turlock reported to WECC a violation of FAC-003-1 resulting from an August 29, 2007, 230 kV line outage and firm

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herbicide treatment, or other actions. The plan should be flexible enough to adjust to changing conditions, taking into consideration anticipated growth of vegetation and all other environmental factors that may have an impact on the reliability of the transmission systems. Adjustments to the plan shall be documented as they occur. The plan should take into consideration the time required to obtain permissions or permits from landowners or regulatory authorities. [The] Transmission Owner shall have systems and procedures for documenting and tracking the planned vegetation management work and ensuring that the vegetation management work was completed according to work specifications."

<sup>5</sup> Pursuant to section 215(e)(2) of the FPA, each penalty determination is subject to Commission review, on our own motion or by the filing of an application for review by the subject of a penalty within thirty days after the date NERC files the applicable notice of penalty. In the absence of the filing of an application for review of a penalty or motion or other action by the Commission, each penalty filed by NERC shall be affirmed by operation of law upon the expiration of the applicable thirty-day period.

load shedding.<sup>6</sup> WECC and Turlock independently concluded that Turlock failed to adequately follow its 2007 Vegetation Management Work Plan. The outage on August 29, 2007, resulted from an almond tree growing into Turlock's 230 kV Westley-Walnut transmission line from within the line's right-of-way (ROW).<sup>7</sup> Turlock's failure to implement its 2007 annual vegetation management work plan resulted in automatic and manual firm load shedding that dropped nearly 40,000 customers comprising a maximum of 270 megawatts (MW) of firm load in the Turlock and Modesto areas, as Turlock stipulated in the settlement agreement. Some customers lost power for more than an hour. According to the Notice, automated load dropping systems shed about 84 MW of firm load in Modesto's service area and about 70 MW of firm load in Turlock's service area. Manual load shedding cut 96 additional MW of firm load in Modesto and 20 more MW of firm load in Turlock.<sup>8</sup> WECC opened a Compliance Violation Investigation of the outage and concluded that Turlock violated FAC-003-1 R2 for failing to maintain sufficient clearances to prevent flashovers between vegetation and the 230 kV Westley-Walnut line. WECC noted that Turlock characterized the violation as having a level 3 (High) of non-compliance.<sup>9</sup>

5. Turlock submitted a mitigation plan to address the violation on September 4, 2007, that included troubleshooter patrols for its 31 miles of 230 kV transmission lines, discussions with landowners and orchards to notify them of increased vegetation clearing, and additional training on compliance with FAC-003-1. On September 11, 2007, Turlock completed an internal investigation and concluded that the outage resulted from human error. Turlock issued a "written reminder," the second of three levels of discipline, to an employee who failed to notice that the almond tree did not have sufficient clearance from the 230 kV Westley-Walnut line.<sup>10</sup>

6. WECC concluded that Turlock's violation of FAC-003-1 R2 lasted from June 18, 2007, through September 14, 2007, when Turlock completed its mitigation plan

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<sup>6</sup> On August 29, 2007, vegetation contact caused Turlock's Westley-Walnut 230 kV line to fault; afterwards, Modesto's Westley-Parker 230 kV line open-ended. This resulted in firm load shedding and recovery operations of approximately 180 MW for Modesto and 90 MW for Turlock, according to the Notice. Notice at 7.

<sup>7</sup> *Id.* at 8.

<sup>8</sup> *Id.* at 7.

<sup>9</sup> *Id.* at 8.

<sup>10</sup> *Id.* at 16.

for that requirement.<sup>11</sup> FAC-003-1 R2 was the only alleged violation addressed in the settlement that resulted in a high impact to the reliability of the Bulk-Power System (BPS).<sup>12</sup>

7. In the settlement agreement, Turlock neither admits nor denies any of the violations alleged in the Notice, but agrees to pay a penalty of \$80,000. According to NERC, WECC states that the FAC-003-1 R2 violation had a high impact on BPS reliability and constituted a significant event warranting a commensurate penalty.<sup>13</sup> WECC believes the remaining alleged violations resulted in a minimal to moderate impact on BPS reliability and should have penalties assessed accordingly.<sup>14</sup> In approving the settlement, NERC's Board of Trustees Compliance Committee (BOTCC) considered WECC's position as stated above and the following stated mitigating factors: (1) Turlock is a small irrigation district that has comparatively limited financial resources; (2) each violation in the agreement is Turlock's first violation of the applicable Standard;<sup>15</sup> (3) Turlock self-reported the FAC-003-1 R2, TPL-001-0 R1, TPL-002-0 R1, TPL-003-0 R1, and TPL-004-0 R1 violations; (4) Turlock management acted swiftly and with substantial disciplinary action after investigating all facets of the serious BPS event resulting from the FAC-003-1 R2 violation; (5) WECC determined that Turlock excels in several categories that indicate a high-quality Internal Compliance Program; and (6) Turlock management and staff fully cooperated with the WECC audit team during the audit and investigation of the alleged violations.<sup>16</sup> NERC's BOTCC also recognized WECC's determination that there were no aggravating factors. Specifically, there were no repeat violations, no relevant negative compliance history, no applicable compliance directives,

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<sup>11</sup> *Id.* at 15.

<sup>12</sup> *Id.* at 3. WECC determined that the remaining alleged violations did not pose a serious or substantial risk to the reliability of the BPS.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> The Commission stated in the February 26 Order that it interprets this statement to mean that these were Turlock's first alleged violations of mandatory Reliability Standards after June 18, 2007, and that each alleged violation of a particular requirement was Turlock's first such alleged violation. February 26 Order, 130 FERC ¶ 61,151 at P 9 n.23.

<sup>16</sup> Notice at 19.

and no evidence of any attempt by Turlock to conceal the violation or that the violation was intentional.<sup>17</sup>

8. On December 11, 2009, the Commission issued a notice extending until January 11, 2010, the time for the Commission to consider whether to further review on its own motion the Notice.<sup>18</sup> On January 11, 2010, the Director of the Office of Enforcement further extended the time period for consideration until February 26, 2010, and issued a data and document request seeking additional information from NERC and WECC relating to the alleged violation of FAC-003-1 R2.<sup>19</sup> On January 26, 2010, NERC and WECC submitted a response to the January 11, 2010, request. NERC, WECC, and Turlock made a supplemental filing with additional information on February 24, 2010.

9. NERC, WECC, and Turlock's February 24, 2010 supplemental filing indicates that at the time of the vegetation contact the primary protection system on the Westley-Walnut line failed to operate because a communication switch that turns the "permissive trip signal on and off" at Turlock's Walnut substation was incorrectly toggled "off."<sup>20</sup> NERC attributes the position of the communications switch to human error.<sup>21</sup> Without the Westley-Walnut line primary protection system, a secondary protection system caused the Westley-Walnut line to trip, and a back-up relay at Modesto's Parker substation caused Modesto's Westley-Parker line to open-end.<sup>22</sup> Tripping of the Westley-Walnut line and open-ending of the Westley-Parker line caused the loss of the Turlock and Modesto firm load.<sup>23</sup>

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<sup>17</sup> *Id.* The Commission expects that entities will not conceal violations. Therefore, a failure to conceal a violation should not be considered a mitigating factor.

<sup>18</sup> *North American Electric Reliability Corporation*, 129 FERC ¶ 61,218 (2009).

<sup>19</sup> *North American Electric Reliability Corporation*, 130 FERC ¶ 62,022 (2010).

<sup>20</sup> February 24, 2010, Supplemental Filing at 1.

<sup>21</sup> *Id.* NERC's Supplemental Filing indicates that the switch has been placed into the correct operating position and relabeled to prevent future mistakes. *Id.* at 2.

<sup>22</sup> In its Supplemental Filing, NERC refers to this occurrence as a "mis-coordination between the Westley relay scheme for the Westley-Walnut 230 kV line and the Parker relay scheme for the Westley-Parker 230 kV line." *Id.*

<sup>23</sup> *Id.* at 2.

## II. The February 26 Order

10. On February 26, 2010, the Commission initiated this review of the proposed penalty to determine whether violations of other Reliability Standards or facts not disclosed in the Notice may have contributed to the loss of firm load on August 29, 2007, and whether the proposed penalty amount should be reconsidered. The Commission stayed the proposed penalty pending the conclusion of the Commission's review and established a filing deadline of March 18, 2010, for any answers, interventions, or comments.

11. In the February 26 Order, the Commission stated that the most significant reason for its review was that Turlock's alleged violation of FAC-003-1 R2 involved an event in which Turlock lost firm load on the BPS.<sup>24</sup> The Commission stated, "[l]oad shedding is not, alone, a violation, and the Commission recognizes that load shedding may sometimes be necessary or required. Yet, unnecessary loss of customer load as a consequence of a Reliability Standard violation is serious, and serves to increase the severity of the underlying violation."<sup>25</sup> In contrast, prior to filing the Notice, NERC had filed eleven other notices of penalty involving an alleged or confirmed violation of FAC-003-1 R2, not including violations of that standard submitted as part of the Omnibus Notice of Penalty Filing,<sup>26</sup> and no other such violation involved a loss of load.<sup>27</sup> The Commission also noted that, while WECC considered that Turlock's alleged violation of FAC-003-1 R2 fell within the June 18 to December 31, 2007, "initial period" of enforcement of the Reliability Standards, NERC had previously approved a \$180,000 penalty assessed by another Regional Entity against Baltimore Gas and Electric Company (BG&E) in a notice of penalty for an FAC-003-1 R2 violation during the initial period in which loss of load did not occur.<sup>28</sup>

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<sup>24</sup> February 26 Order, 130 FERC ¶ 61,151 at P 1, 10-12.

<sup>25</sup> *Id.* P 12.

<sup>26</sup> *Order on Omnibus Notice of Penalty Filing*, 129 FERC ¶ 61,119 (2009).

<sup>27</sup> *See* Docket Nos. NP10-1-000, NP09-43-000, NP09-41-000, NP09-40-000, NP09-37-000, NP09-35-000, NP09-31-000 (2009), NP09-3-000, NP08-33-000, NP08-2-000, NP08-1-000 (2008).

<sup>28</sup> February 26 Order, 130 FERC ¶ 61,151 at P 13 n.38 (referring to North American Electric Reliability Corporation, Docket No. NP08-1-000, at 2 (filed June 4, 2008)).

12. The Commission also stated as a reason for its review that the penalty amounts in other notices that NERC had filed as of February 26, 2010, alleging FAC-003-1 R2 violations, ranged from \$0 to \$250,000,<sup>29</sup> none of which involved a loss of load.<sup>30</sup> Moreover, the Commission stated that the transmission outage on Turlock's system caused load loss for thousands of customers both within Turlock's service area and within Modesto's neighboring service area.<sup>31</sup> The Commission observed that the Notice indicates that the loss of load resulting from Turlock's vegetation contact was more severe in Modesto's service area (a total of 180 MW) than in Turlock's service area (a total of 90 MW).<sup>32</sup> The Commission also pointed out that, for example, the \$225,000 penalty against Commonwealth Edison Company (Com Ed) in Docket No. NP10-1-000, for a single alleged violation of FAC-003-1 R2 involving three momentary transmission line outages, was more than 280 percent of the penalty amount in this Notice even though Com Ed's alleged violation did not result in a loss of load.<sup>33</sup> The Commission observed that in the Notice, WECC and NERC did not examine or attempt to quantify the actual harm caused by the load loss.<sup>34</sup> The Commission stated that, because the consequences of Turlock's FAC-003-1 R2 alleged violation are much more severe than those of the other notices involving the same standard and requirement, the penalty against Turlock arguably should be higher than the highest penalty amount yet assessed for the same violation.<sup>35</sup> The Commission recognized that Turlock is a non-profit entity, but stated that the harm of this level of severity appears to support a higher penalty amount.<sup>36</sup>

13. The Commission next questioned WECC's finding, which appears to be a mitigating factor affecting the penalty amount, that Turlock self-reported the

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<sup>29</sup> See *North American Electric Reliability Corporation*, Docket No. NP10-48-000 (filed Feb. 1, 2010) (Notice of Penalty proposing a \$250,000 penalty for two alleged violations of FAC-003-1 R2).

<sup>30</sup> February 26 Order, 130 FERC ¶ 61,151 at P 14.

<sup>31</sup> *Id.*

<sup>32</sup> *Id.* The Commission also directed NERC and WECC to address the fact that information in their February 24 Supplemental Filing could yield a different calculation of the maximum loss of load than the 270 MW stated in the Notice. *Id.* P 14 n.34.

<sup>33</sup> *Id.*

<sup>34</sup> *Id.*

<sup>35</sup> *Id.*

<sup>36</sup> *Id.* n.40.

FAC-003-1 R2 violation.<sup>37</sup> The Commission stated that both Turlock and Modesto, which also shed load in response to the fault, were required to report the event as a reportable disturbance. Reliability Standard EOP-004-1 R3 and Attachment 1-EOP-004 require a registered entity to report to the relevant Regional Entity certain disturbances, including those that result in firm load shedding of 100 MW or more to maintain the reliability of the BPS.<sup>38</sup> The Commission did not see why Turlock should receive self-reporting credit when its notification to WECC was a required act, more akin to a self-certification, that does not support a reduction in penalty amount.<sup>39</sup>

14. Further, the Commission stated that nothing in the Notice addresses the system conditions on the day of the fault.<sup>40</sup> The Commission suggested that the consequences of the vegetation contact could be more severe than presented in the Notice if they extended to aggravating overloaded transmission lines or operating reserve deficiencies, for example.<sup>41</sup> The Commission noted that the incident occurred in August, when the weather tends to be hottest and system loads tend to be high.<sup>42</sup> The Commission also stated that WECC and NERC should have inquired as to whether the California Independent System Operator (CAISO) issued Emergency Energy Alerts for that day, and also how the vegetation contact and consequential transmission outage may have exacerbated sensitive operating conditions on CAISO's portion of the Western Interconnection.<sup>43</sup> The Commission stated that the record does not examine potential

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<sup>37</sup> *Id.* P 15.

<sup>38</sup> *Id.* n.43 (citing Event 5 listed in Attachment 1-EOP-004). The Commission also observed that the loss of load was more than twice this threshold amount qualifying the event as a reportable disturbance, further corroborating the finding that the instant facts present a serious violation.

<sup>39</sup> *See Guidance Order on Reliability Notices of Penalty*, 124 FERC ¶ 61,015, at P 32 (2008). In contrast, a self-report confers the maximum benefit to compliance when it informs a compliance authority of a violation that otherwise would not have come to the compliance authority's attention. *See also* February 26 Order, 130 FERC ¶ 61,151 at P 15.

<sup>40</sup> February 26 Order, 130 FERC ¶ 61,151 at P 16.

<sup>41</sup> *Id.*

<sup>42</sup> *Id.*

<sup>43</sup> *Id.*

externalities of the fault beyond noting that the fault also resulted in Modesto dropping load.<sup>44</sup>

15. Finally, the Commission stated that Turlock's mitigation efforts appeared less rigorous than warranted by the facts and seriousness of the matter.<sup>45</sup> Turlock's entire mitigation plan for FAC-003-1 R2 included an emergency "tree-only" inspection of the particular line involved in the event, some related trimming, and refresher training for Turlock's field personnel on certain aspects of its vegetation management plan.<sup>46</sup> The Commission stated that it would expect that proper mitigation would involve, at minimum, Turlock's re-evaluation of its procedures for inspecting and determining tree clearances to ensure that its methods are designed to avoid, to the extent feasible, the inspection practices that contributed to the fault.<sup>47</sup>

### **III. Interventions and Comments**

16. Timely motions to intervene were filed by Turlock, Modesto, WECC, Dominion Resources Services, Inc., Electric Power Supply Association, Edison Electric Institute, American Public Power Association (APPA), Transmission Agency of Northern California, Sacramento Municipal Utility District, National Rural Electric Cooperative Association (NRECA), and American Transmission Company (ATC). Responses to the order initiating review were filed by NERC and WECC. Comments were filed by Turlock, Modesto, NRECA, APPA, and ATC.

17. NERC, WECC, Turlock, and other commenters address the facts relating to Turlock's alleged violation of FAC-003-1 R2. They contend that two distinct contingencies combined to trigger the August 29, 2007, outage of two transmission lines: (1) the 230 kV Westley-Walnut transmission line sagged into a tree, causing relay operation to open that circuit; and (2) the 230 kV Wesley-Parker line tripped because a communication switch at the Walnut substation was incorrectly toggled in the "off" position, thus preventing the primary relay-protection scheme from operating before the back-up relay at the Parker substation sensed an apparent ground fault current and tripped the Westley-Parker line.<sup>48</sup> APPA characterizes these two contingencies as "apparent

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<sup>44</sup> *Id.*

<sup>45</sup> *Id.* P 17.

<sup>46</sup> *Id.*

<sup>47</sup> *Id.*

<sup>48</sup> *See, e.g.*, NERC/WECC Comments at 6-7 and 14; Turlock Comments at 3-4; Modesto Comments at 6-8; and APPA Comments at 6-7. Turlock states that it jointly

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human errors”—a vegetation management contact that should have been prevented and a communication device switch that was set in the incorrect position—which combined to cause the outage.<sup>49</sup> Turlock asserts that if the communication switch had been in the “on” position, the tree contact associated with the alleged violation of FAC-003-1 R2 would not have resulted in a loss of load.<sup>50</sup> Thus, Turlock argues, and NERC and WECC agree, that the violation of FAC-003-1 R2 was not the direct cause of the lost load; rather, the lost load was the direct result of the mis-positioned communication switch.<sup>51</sup> Turlock believes that WECC did not penalize Turlock or increase the penalty for the mis-positioning of the communication switch because such an error by itself does not constitute a violation of FAC-003-1 R2 or any other Reliability Standard or Requirement.<sup>52</sup>

18. NERC and WECC analogize the mis-positioning of the communication switch to an error addressed in an earlier notice of penalty involving Mid-American Energy Company (Mid-American), Docket No. NP08-2-000. NERC asserts that in that case, Mid-American failed to correct a tree’s encroachment within a clearance distance from one of its transmission lines because of a location number transposition error in preparing the work order for the field work crew. The tree later caused a trip of the line under which it was growing. Mid-American was penalized \$75,000 for a violation of FAC-003-1 R2, but the transposition error was not considered an aggravating factor in the penalty determination.<sup>53</sup>

19. Modesto asserts that the communication switch was in the wrong position because of an apparent mis-coordination, not a misoperation, since the back-up relay was engaged

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owns with Modesto the Westley-Walnut and Westley-Parker lines. Turlock Comments at 6.

<sup>49</sup> APPA Comments at 7.

<sup>50</sup> Turlock Comments at 14.

<sup>51</sup> Turlock Comments at 14 and NERC/WECC Comments at 6-7. NERC states that the mis-positioned relay switch contributed to the resulting lost load.

<sup>52</sup> Turlock Comments at 14-15 and 30.

<sup>53</sup> NERC/WECC Comments at 7. The Commission declined to review the Mid-American notice of penalty in the *Guidance Order on Reliability Notices of Penalty*, 124 FERC ¶ 61,015, at P 15-16 (2008).

but did not coordinate for the outage.<sup>54</sup> Modesto contends that mis-coordination refers to the inherent inability to have a protection device coordinate with all remote protection devices in the vicinity, under all possible fault scenarios, and does not connote human error or otherwise a lapse in judgment or negligence.<sup>55</sup> According to Modesto, while settings were adjusted after the event to minimize the potential for mis-coordination, potential for mis-coordination cannot be eliminated for all scenarios, which is “a normal and accepted state.”<sup>56</sup> NERC and WECC similarly observe that “overall system conditions and configuration are dynamic as load and generation changes over and around Turlock’s and Modesto’s locale of the BPS . . . [making] it difficult to implement static relay settings that will be optimum over the full range of anticipated system conditions.”<sup>57</sup>

20. Turlock states that, regarding the communication switch, WECC did not find a violation of two other Reliability Standard requirements, PRC-004-1 R3 or PRC-001-1 R4.<sup>58</sup> Turlock asserts that no violation of PRC-004-1 R3 occurred, as WECC determined that no misoperation had occurred because the protective device at Parker operated as expected according to its setting.<sup>59</sup> Modesto and Turlock contend that no violation of PRC-001-1 R4 occurred because the two coordinated their protection systems prior to the outage.<sup>60</sup> NERC states that while there is evidence that Turlock and

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<sup>54</sup> Modesto Comments at 6. Stating that its “operation” was a relay that operated as a backup, Modesto asserts that the operation falls within an exception to the relevant definition of mis-operation in the NERC Glossary: “Any operation for a fault not within a zone of protection (other than operation as backup protection for a fault in an adjacent zone that is not cleared within a specific time for the protection of that zone).” *Id.* n.9.

<sup>55</sup> *Id.* at 6.

<sup>56</sup> *Id.* at 7.

<sup>57</sup> NERC/WECC Comments at 15.

<sup>58</sup> Turlock Comments at 29. PRC-004-1 R3 requires Turlock, as a Transmission Owner, to provide to WECC documentation of its misoperation analyses and corrective action plans according to the regional reliability organization’s procedures, while PRC-001-1 R4 provides that Turlock, as a Transmission Operator, shall coordinate protection systems on major transmission lines and interconnections with neighboring Generator Operators, Transmission Operators, and Balancing Authorities.

<sup>59</sup> *Id.* See also NERC/WECC Comments at 15.

<sup>60</sup> Modesto Comments at 9-10 and Turlock Comments at 29.

Modesto coordinated what the proper settings would be, it now believes that Turlock appears to have failed to implement the agreed-upon switch position at some point and to have failed to communicate the switch change from the agreed-upon position, in possible contravention of PRC-001-1.<sup>61</sup> NERC believes that, notwithstanding this fact, no change in the penalty is warranted given the size of the penalty and the appropriate corrective actions that were taken.<sup>62</sup> Moreover, while stating that its BOTCC did not consider the PRC-004-1 R3 or PRC-001-1 R4 issues, because they were not part of the settlement agreement, NERC represents that the BOTCC would not have considered the switch's wrong position to be an aggravating factor with response to the FAC-003-1 violation that would warrant adjustment of the penalty.<sup>63</sup>

21. Modesto states that it acted in accordance with all NERC and WECC Reliability Standards leading up to, through, and after the August 29, 2007, outage and that WECC's Compliance Violation Investigation (CVI) found no violations by Modesto of Reliability Standards and agreed that the protection devices at issue operated correctly.<sup>64</sup>

22. Turlock, NERC, WECC, and Modesto agree that the actual load lost was a maximum of 231 MW, rather than the maximum of 270 MW to which Turlock stipulated in the settlement with WECC.<sup>65</sup>

23. NERC, WECC, Turlock, APPA, and NRECA argue that the penalty amount is appropriate in light of Turlock's size, ability to pay, status as a non-profit, public entity, and because of the limited size, duration, and impact of Turlock's alleged violation.<sup>66</sup>

24. Specifically, Turlock asserts that no "quantifiable actual harm" resulted from the August 29, 2007, loss of load because the load shedding lasted only slightly over one hour and caused no damage, injuries, or fatalities.<sup>67</sup> Modesto concurs and states that no

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<sup>61</sup> NERC/WECC Comments at 15.

<sup>62</sup> *Id.* at 15-16.

<sup>63</sup> *Id.* at 16.

<sup>64</sup> Modesto Comments at 8 and 13.

<sup>65</sup> *See, e.g.*, NERC/WECC Comments at 5-6; Turlock Comments at 8-12; and Modesto Comments at 10-11.

<sup>66</sup> *See, e.g.*, NERC/WECC Comments at 3-9; Turlock Comments at 8-16; Modesto at 10-11; APPA Comments at 8; and NRECA Comments at 4-6.

<sup>67</sup> Turlock Comments at 14.

actual harm resulted in its system from the outage or the related load shedding.<sup>68</sup> NERC and WECC, Turlock, and NRECA state that Turlock's penalty is appropriately lower than the penalties assessed against BG&E and Com Ed for violations of FAC-003-1 R2 because Turlock is substantially smaller than those other entities.<sup>69</sup> Turlock points out that it operates a "sub-control area" within the Balancing Authority of Sacramento Municipal Utility District, and states that the penalty amount is appropriate in light of its limited ability to affect the BPS.<sup>70</sup> APPA contends that the prior penalties indicate that Turlock's penalty is too large.<sup>71</sup>

25. Turlock argues that its decision to shed retail load is not an aggravating factor, and that neither the Reliability Standards nor the NERC Sanction Guidelines suggests that shedding of load constitutes either a violation of the standards or allows for load shedding to be an aggravating factor that should increase the penalty.<sup>72</sup> Turlock describes load shedding (both manual and automatic) as a tool employed by utilities to limit and contain the impact of an outage by preventing it from cascading, and states that its use of this tool enabled it to contain the outage to a relatively small area.<sup>73</sup> APPA agrees that automatic and operator-initiated load shedding is not a violation of the Reliability Standards, and that NERC standards require system operators to shed load manually and take other emergency actions as needed to return the BPS to a stable condition.<sup>74</sup>

26. NRECA expresses concern that the February 26 Order could be viewed as a signal that any loss of load will be accompanied by a significant penalty, noting that smaller systems have a greater likelihood of system impacts, including load shedding.<sup>75</sup> APPA urges the Commission not to adopt a "bright line" presumption regarding load shedding

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<sup>68</sup> Modesto Comments at 11.

<sup>69</sup> NERC/WECC Comments at 6-8; Turlock Comments at 12-16; and NRECA Comments at 4-6.

<sup>70</sup> Turlock Comments at 6 and 14.

<sup>71</sup> APPA Comments at 8. APPA measures Turlock's size by revenue and number of customers, *id.*, while Turlock suggests that the number of miles of transmission lines is the appropriate measure. Turlock Comments at 15.

<sup>72</sup> Turlock Comments at 13. *See also* NERC/WECC Comments at 6.

<sup>73</sup> Turlock Comments at 13.

<sup>74</sup> APPA Comments at 6.

<sup>75</sup> NRECA Comments at 6.

and penalties because such a presumption could send mixed regulatory signals to the industry about the Commission's performance expectations.<sup>76</sup> NERC and WECC argue that they and the industry have worked for decades to provide operators with the authority and confidence to shed load when needed to save the system, and that penalizing such action could be detrimental to reliability.<sup>77</sup> NERC and WECC further argue that the amount of load lost should be a general consideration in reflecting upon the impact on system reliability, but nothing more.<sup>78</sup> Similarly, NRECA states that the Commission should not speak generically as to all cases involving loss of load, and not necessarily presuppose an aggravating factor solely due to the fact that load shedding took place.<sup>79</sup> ATC warns that any lack of clarity could have the perverse result of reducing the reliability of the BPS rather than increasing it, because operators may hesitate to shed load when doing so is the desired and appropriate course of action to preserve the reliable operation of the entire BPS.<sup>80</sup>

27. NERC and WECC contend that the settlement takes into account the actual loss of load that occurred and the relevant factors of the NERC Sanction Guidelines. They state further that a penalty that substantially exceeds that which is supported by the record in accordance with the NERC Sanction Guidelines is not a good use of resources; becomes unduly punitive; and may signal to the industry that litigation, rather than prompt resolution, should be pursued.<sup>81</sup> NERC and WECC also note that the violations at issue occurred in the early days of mandatory applicability and enforceability of NERC Reliability Standards and that Turlock, as a "§ 201(f) entity" that is not otherwise subject to the Commission's jurisdiction pursuant to Part II of the FPA, was a newly registered and comparatively small entity in the WECC Interconnection.<sup>82</sup> APPA argues that an

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<sup>76</sup> APPA Comments at 6.

<sup>77</sup> NERC/WECC Comments at 4.

<sup>78</sup> *Id.* at 5.

<sup>79</sup> NRECA Comments at 6.

<sup>80</sup> ATC Comments at 4.

<sup>81</sup> NERC/WECC Comments at 4.

<sup>82</sup> *Id.* at 3. Under FPA section 201(f), 16 U.S.C. § 824(f), no provision in Part II of the FPA applies to Turlock, as an irrigation district organized under the laws of the State of California, unless such provision makes specific reference thereto. FPA section 215 applies to users, owners, and operators of the BPS, including Turlock.

increased penalty will neither encourage better future performance by Turlock nor increase the operational performance of the industry as a whole.<sup>83</sup>

28. NERC, WECC, and Turlock assert that Turlock's actions qualify as a self-report and that Turlock should be and was appropriately given credit for voluntarily disclosing the FAC-003-1 violation.<sup>84</sup> Turlock argues, and NERC and WECC concur, that under EOP-004-1, Turlock was only required to report that a disturbance had occurred, so it went beyond its obligations by directly self-reporting the cause of the disturbance to WECC and identifying its belief that the disturbance may have constituted a violation of FAC-003-1 R2.<sup>85</sup> Turlock also contends that it disclosed voluntarily the load loss to WECC's compliance staff in addition to its mandated disclosure to WECC's functionally separate operations staff. Turlock believes that its disclosure is indicative of its commitment to WECC and NERC compliance, transparency, and openness.<sup>86</sup> Turlock disagrees with the Commission's suggestion that its self-report was merely a self-certification because Turlock used WECC's designated self-reporting form. Turlock asserts that a self-certification involves an entity responding to directives from Regional Entities for information.<sup>87</sup>

29. NERC, WECC, and Turlock assert that the record adequately addressed CAISO system conditions on the day of the load loss.<sup>88</sup> Turlock asserts that WECC and NERC inquired into and considered the "externalities of the alleged violation" in reaching the settlement, including the temperature and peak load on that day and the peak load for the entire year.<sup>89</sup> Turlock contends that its load shedding did not exacerbate sensitive operating conditions and was initiated so that the remaining transmission facilities would remain within their respective transmission System Operating Limits, not because there was a resource deficiency.<sup>90</sup>

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<sup>83</sup> APPA Comments at 7.

<sup>84</sup> *See, e.g.*, NERC/WECC Comments at 9-10 and Turlock Comments at 16-18.

<sup>85</sup> Turlock Comments at 17 and NERC/WECC Comments at 9-10.

<sup>86</sup> Turlock Comments at 17.

<sup>87</sup> *Id.* at 17-18.

<sup>88</sup> NERC/WECC Comments at 10-12 and Turlock Comments at 18-21.

<sup>89</sup> Turlock Comments at 18 and 20.

<sup>90</sup> *Id.* at 20-21.

30. NERC, WECC, Turlock, and APPA argue that Turlock instituted appropriate measures to improve reliability after the loss of load.<sup>91</sup> Turlock states that the Commission's characterization of its mitigation and remediation efforts ignores the rigor of those efforts.<sup>92</sup> All these commenters discuss the mitigation measures Turlock employed immediately after the event as part of its mitigation plan and the additional efforts it instituted. For example, Turlock upgraded its transmission vegetation maintenance plan before the loss of load took place<sup>93</sup> and performed the first Light Detection and Ranging (LiDAR) survey of its 230 kV lines and other key transmission lines in March 2008 at a cost of \$307,000.<sup>94</sup> Turlock points out that it and Modesto each recently completed an additional transmission line so that the "double contingency" at issue in this Notice, if repeated, will no longer cause a loss of load, even during the summer peak.<sup>95</sup> APPA contends that the costs Turlock incurred to implement its mitigation and remediation efforts far exceed the penalty amount of the settlement.<sup>96</sup>

31. ATC argues that if the Commission concludes that an increased penalty is warranted, we should make clear our reasoning and the facts upon which our determination is based so that operators of the BPS have clear guidance to follow.<sup>97</sup> Similarly, NERC and WECC assert that, to the extent the Commission wishes to provide guidance on establishing appropriate penalties, such guidance should have prospective

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<sup>91</sup> See, e.g., NERC/WECC Comments at 4 and 12-13; Turlock Comments at 22-27; and APPA Comments at 5.

<sup>92</sup> Turlock Comments at 22.

<sup>93</sup> Turlock states that before the vegetation contact, it changed its method of determining the minimum acceptable vegetation clearance from an observer's estimate from the ground of vegetation clearances to a maximum tree height determined by the worst case line sag condition. Turlock's inspectors and tree crews are given measuring rods, and tree crews trim all trees to the height of the rod. Turlock Comments at 25.

<sup>94</sup> Turlock Comments at 26. LiDAR measures distances, including vegetation positions, by sending pulses of light from lasers that reflect from surfaces and return to a laser detector.

<sup>95</sup> Turlock Comments at 22-27; see also NERC/WECC Comments at 12-13 and APPA Comments at 5.

<sup>96</sup> APPA Comments at 5.

<sup>97</sup> ATC Comments at 4.

application and not result in modification of the penalty in the settlement at issue.<sup>98</sup> APPA urges a forward-looking focus on industry performance and states that the sharing of lessons learned from early reliability violations would do much to improve the reliable operation of the BPS.<sup>99</sup>

#### IV. Commission Determination

32. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure,<sup>100</sup> the timely, unopposed motions to intervene serve to make the movants parties to this proceeding.

##### A. Review of Notices of Penalty that Include Settlements

33. Under section 215(e)(2) of the FPA, a penalty assessed through the notice of penalty process "shall be subject to review by the Commission, on its own motion or upon application by the user, owner, or operator that is the subject of the penalty filed." When reviewing a notice of penalty, the Commission may affirm, set aside or modify the proposed penalty, or remand the determination of the proposed penalty, or its form or amount, to the ERO for further proceedings.<sup>101</sup> As the Commission previously stated, and re-emphasized in the February 26 Order, the Commission does not expect to reject Regional Entity settlements as a usual practice, and continues to encourage settlements by the Regional Entities and NERC.<sup>102</sup> If appropriate, the Commission can and will review and remand a settled penalty amount and/or a mitigation plan when we believe, after consideration of the record, that a remand is in the public interest.<sup>103</sup> For the reasons discussed below, however, we affirm this Notice and permit the penalty

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<sup>98</sup> NERC/WECC Comments at 5.

<sup>99</sup> APPA Comments at 5 and 7.

<sup>100</sup> 18 C.F.R. § 385.214 (2009).

<sup>101</sup> *Review of Notices of Penalty for Violations of Reliability Standards, statement of administrative policy on processing reliability notices of penalty and order revising statement in Order No. 672*, 123 FERC ¶ 61,046, at P 13 (2008) (Notice of Penalty Policy Order).

<sup>102</sup> *Id.* P 18; February 26 Order, 130 FERC ¶ 61,151 at P 10.

<sup>103</sup> Notice of Penalty Policy Order, 123 FERC ¶ 61,046 at P 16 ("[W]e do not believe it reasonable to treat settlements as categorically different from other notices of penalty.").

established by the settlement agreement reached between Turlock and WECC to become effective on the date of issuance of this order.

**B. Determination on Review**

34. We consider the penalty amount to be acceptable given the fact that the vegetation contact resulting from the alleged violation occurred within several weeks after FAC-003-1 became effective and mandatory within the United States on June 18, 2007. As such, the alleged violation is subject to the Commission's direction in Order No. 693 that the ERO and Regional Entities focus their resources on the most serious violations from June 18, 2007, through the end of 2007, and that the ERO and Regional Entities would have the discretion necessary to assess penalties for such violations.<sup>104</sup> The Commission emphasized that during the initial period after Reliability Standards first became effective, a Regional Entity could assess a monetary penalty "in a situation where, for example, an entity's non-compliance puts Bulk-Power System reliability at risk."<sup>105</sup> Having issued these instructions, in part for the purpose of "allowing users, owners and operators of the Bulk-Power System to acquaint themselves with the new requirements and enforcement program[,]"<sup>106</sup> we do not believe that WECC erred in entering into an agreement to assess Turlock the penalty under review. Under the particular circumstances of this Notice, we affirm the penalty, effective on the date of issuance of this order.

35. Notwithstanding our decision to affirm the penalty in this instance, comments filed in response to the Commission's February 26 Order raise several issues regarding the notice of penalty process. The Commission will address these issues to provide guidance to NERC, the Regional Entities, and the industry on how we expect to handle these issues on a prospective basis.

**C. Concerns as to This Matter**

**1. Adequacy of the Filed Record**

36. Had the Commission's staff not issued a data request seeking additional information and had the Commission not initiated review on its own motion, it would

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<sup>104</sup> *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242, at P 223, *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

<sup>105</sup> *Id.* P 224.

<sup>106</sup> *Id.*

have not discovered facts that we believe are critical in evaluating and assessing Turlock's penalty and subsequent efforts to increase compliance and improve reliability. For example, the original record raised questions about system conditions and whether they affected or may have been affected by the event, questions which were addressed only upon receipt by the Commission staff of responses to its data request. Significantly, critical facts regarding the Walnut communications switch and how it contributed to the load loss did not appear in the Notice.

37. NERC should file a complete and accurate record for each notice of penalty, whether it reflects an adjudicated determination or a settlement with the registered entity.<sup>107</sup> Similarly, the Commission has authority as part of our *de novo* review of a notice of penalty to determine if the record adequately supports the penalty whether or not it results from a negotiated agreement with the registered entity.<sup>108</sup>

## 2. Factors That Could Affect Future Reviews of Penalty Amounts

### a. Load Shedding

38. NERC, WECC, and NRECA argue that the load loss indirectly resulted from an alleged violation and that by questioning the penalty amount in the February 26 Order, we are discouraging the use of load shedding where such an action is warranted. As we reiterate, load shedding is not, alone, a violation, and in fact may be necessary or required to comply with a Reliability Standard as a last resort to contain system emergencies and prevent cascading.<sup>109</sup> If the Reliability Standards require load shedding, system operators should shed load, and their decision to shed load would not result in a violation. The Commission would not approve or assess a penalty for conduct that is required by the Reliability Standards. If, however, load shedding *results from* a violation of a Reliability Standard, the penalty for the violation should take into account the lost load because the violation created a more serious risk or result than a similar violation that did not necessitate load shedding. We do not intend our position on this issue to have a chilling effect on system operators' willingness to shed load for fear of risking a higher penalty.

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<sup>107</sup> See 18 C.F.R. § 39.7(d) (2010).

<sup>108</sup> Notice of Penalty Policy Order, 123 FERC ¶ 61,046 at P 9.

<sup>109</sup> See February 26 Order, 130 FERC ¶ 61,151 at P 12. Indeed, the Reliability Standards require load shedding in response to certain energy emergencies. See, e.g., Reliability Standards EOP-002-2 R6-R7; EOP-003-1 R1-R2. See also Table 1, Transmission System Standards – Normal and Emergency Conditions, appended to Reliability Standards TPL-001-0 through TPL-004-0 (outlining instances that call for planned losses of load under Reliability Standards TPL-001-0 through TPL-004-0).

In fact, load shedding is sometimes required by the Reliability Standards. Moreover, the failure to shed load when appropriate could lead to greater load loss, damage to assets, and further increase the penalty that should be assessed.

39. We also disagree with NERC, WECC, and Turlock's claim that because the load-shedding in this case resulted from two factors—the out-of-position communication switch and the vegetation touch—the Commission should treat only one of these factors—the out-of-position communication switch—as the cause of the outage. As the record in this case indicates, the out-of-position switch could not have resulted in load being shed without an initiating event, i.e., the vegetation touch that resulted from an alleged violation of FAC-003-1 R2.

**b. Harm From Loss of Load**

40. As the Commission noted in its February 26 Order, Turlock's alleged violation resulted in the loss of firm customer load. Section 215(e)(6) of the FPA requires the Commission to ensure that any penalty imposed for a violation of a Reliability Standard bears "a reasonable relation to the seriousness of the violation and shall take into consideration the efforts of such user, owner or operator to remedy the violation in a timely manner." The Commission pointed out in Order No. 672 that the actual or potential effect of a violation is "certainly one consideration in determining the seriousness of the violation."<sup>110</sup> In evaluating a notice of penalty, we have interpreted the obligation to consider the seriousness of the violation as requiring us to consider any actual harm as well as the risk to reliability posed by a violation of a Reliability Standard.<sup>111</sup> The role of loss of load has been a significant factor in the Commission's consideration of harm caused from reliability violations.

41. Turlock and Modesto indicate that there was no actual harm from the loss of load because no customers suffered damages, injuries, or fatalities. While it is fortunate that no major injuries can be traced to this incident, a loss of load caused by a violation of a Reliability Standard results in harm that is unnecessary and avoidable. Thus, in order to set penalties at an appropriate level, we will consider the quantity of load lost in our analysis of the harm when it occurs, based on the particulars of the load lost resulting from a violation.

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<sup>110</sup> *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards*, Order No. 672, FERC Stats. & Regs. ¶ 31,204, at P 551 (2006). The Commission noted that actual or potential effect of a violation is not the only consideration as to its seriousness.

<sup>111</sup> Notice of Penalty Policy Order, 123 FERC ¶ 61,046 at P 11.

42. We disagree with Turlock that NERC's Sanction Guidelines do not allow load shedding resulting from a violation of a Reliability Standard to be considered in a penalty determination. For example, while harm resulting from a violation is not specifically included in the Sanction Guidelines' list of "adjustment factors" that may lower or increase a base penalty amount relating to the specific facts and circumstances of a violation, a Regional Entity and NERC may consider other factors they deem appropriate.<sup>112</sup> We view actual harm resulting from a violation of a Reliability Standard as an appropriate penalty adjustment factor for the Sanction Guidelines if a Regional Entity or NERC does not consider such harm in setting a base penalty amount.<sup>113</sup>

43. We emphasize that while it is appropriate to consider loss of load resulting from a reliability violation, we also recognize that load shedding can be required by the Reliability Standards as a last resort to contain system emergencies and prevent cascading. Moreover, an underlying violation may require an operator to shed load to comply with a Reliability Standard to protect customers from a larger, possibly cascading outage. In such a situation, the operator's decision to shed load pursuant to the Reliability Standard is not itself a violation and the Commission would not approve or assess a penalty for that decision. In considering an appropriate penalty for the underlying violation, however, we would consider, in assessing the seriousness of the violation, that it resulted in a loss of load.

**c. A Registered Entity's Efforts After an Alleged Violation**

44. Because we affirm the penalty in this matter, we need not decide whether Turlock's use of LiDAR in evaluating vegetation clearance could have been a mitigating factor in determining a penalty. We generally consider that an entity's efforts to achieve or maintain compliance with Reliability Standards should not be the basis for an offset to or reduction in the penalty amount for a violation. A registered entity's significantly

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<sup>112</sup> Section 4.3 of the Sanction Guidelines states: "NERC or the [Regional Entity] may also consider other additional factors it deems appropriate under the circumstances as long as their use is clearly identified and adequately justified. The effect of using these factors will also be fully and clearly disclosed."

<sup>113</sup> Providing estimates of the impact of outages has become a standard part of the analysis of major blackouts. See, e.g., *Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations* (U.S.-Canada Power System Outage Task Force: April 2004), available at <http://www.ferc.gov/industries/electric/indus-act/reliability/blackout/ch1-3.pdf>; Jane L. Corwin & William T. Miles, *Impact Assessment of the 1977 New York City Blackout* (Final Report Prepared for United States Department of Energy: July 1978), available at <http://www.ferc.gov/industries/electric/indus-act/reliability/blackout/impact-77.pdf>.

enhanced efforts in response to a Reliability Standard violation that go beyond what is required to attain compliance nevertheless may be considered in determining a penalty amount under the standard articulated for penalty determinations in FPA section 215(e)(6).

**d. Size and Nature of a Registered Entity**

45. In Order No. 672 the Commission said that “the relative size of an entity or its financial ability [to pay a penalty] is a factor that the ERO or a Regional Entity may consider when developing penalty guidelines or determining an appropriate penalty in a particular case.”<sup>114</sup> Contrary to the assertions made by Turlock, NERC, WECC, and APPA, a violation of FAC-003-1 R2 does not automatically warrant a lower penalty than other notices of penalty involving alleged or confirmed violations of FAC-003-1 R2 because the violator is a smaller entity than other registered entities assessed such penalties and is a public entity. We disagree with Turlock that we should focus on the size of an entity to be penalized as measured solely by the number of miles of transmission lines it operates and its interconnections with the BPS. Rather, we determine size by looking at multiple factors, which might vary depending on the particular circumstances. For example, we might consider the number of employees; the annual revenue, profits, and budget of the organization; the number of separate operating divisions or units within the organization; and the corporate structure of the organization. We also agree with APPA that an entity’s financial status could reflect its ability to pay. However, we also note that the Commission will not generally consider the size and nature of the registered entity as the most important factor in reviewing notices of penalty.

**e. Cooperation Versus Self-Reporting**

46. We disagree with Turlock’s contention that it self-reported its alleged FAC-003-1 R2 violation. Instead, Turlock fulfilled its notification requirements under EOP-004-1 R3 by informing WECC that it had experienced a loss of firm load as a result of a vegetation contact and later cooperated with WECC by providing additional information about the disturbance on its system. As stated in the February 26 Order, because Turlock was forced to shed load, regardless of the reason, it was required to report the event as a reportable disturbance: “Reliability Standard EOP-004-1 R3 and Attachment 1-EOP-004 require a registered entity to report certain disturbances including, among others, those that result in firm load shedding of 100 MW or more to maintain the reliability of the bulk electric system.”<sup>115</sup> Because Turlock was required to report the event, self-reporting

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<sup>114</sup> Order No. 672, FERC Stats. & Regs. ¶ 31,204 at P 564.

<sup>115</sup> February 26 Order, 130 FERC ¶ 61,151 at P 15.

credit is not appropriate. Similarly, Turlock mistakenly argues that under EOP-004-1 it was required only to report that a disturbance had occurred and went “above and beyond” its obligation by directly self-reporting the cause of the disturbance to WECC and its belief that the disturbance may have constituted a violation of FAC-003-1 R2. In fact, NERC and WECC provided information in their January 26, 2010, responses to data requests that Turlock submitted a notification to WECC pursuant to EOP-004-1 R3 after the loss of load, using a NERC Preliminary Disturbance Report Form that instructs the submitter, among other things, to identify the cause of the disturbance.<sup>116</sup> Turlock appears to have promptly provided additional information to WECC after initially reporting the disturbance on its system as required by EOP-004-1 R3.<sup>117</sup> At that time, Turlock was cooperating with WECC, not self-reporting a violation.

47. When a registered entity informs a Regional Entity of a potential violation through a report required more quickly by another standard than by the one that the registered entity may have violated, we will expect the Regional Entity and NERC to remove self-reporting as a mitigating factor when assessing a penalty amount. The Regional Entity and NERC may recognize the registered entity’s cooperation thereafter as a separate mitigating factor in the penalty determination of this Notice, if justified.

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<sup>116</sup> NERC and WECC’s January 26, 2010, Response to Requests for Data and Documents at 6. A version of this form is appended to Attachment 1-EOP-004 to EOP-004-1.

<sup>117</sup> Turlock’s argument that it sent its disturbance report to WECC’s operations staff, rather than to WECC’s compliance staff, is not a meaningful distinction in our view. We expect any Regional Entity to refer to its compliance staff an EOP-004-1 report of a vegetation-related outage that was not due to adverse weather. Because NERC circulates EOP-004-1 reports widely through e-mail groups, Regional Entity compliance staffs should be aware of them in any event. We reject Turlock’s argument that its EOP-004-1 report was unlike a self-certification because WECC had not issued a directive to report vegetation-related outages. EOP-004-1 and Attachment 1-EOP-004 required Turlock to report its vegetation-related outage precisely because the loss of load exceeded 100 MW. For the same reason, we reject NERC’s argument that Turlock self-reported the vegetation contact in advance of its quarterly reporting obligation in FAC-003-1 R3 for sustained transmission line outages caused by vegetation. Turlock notified WECC of the vegetation contact through its required EOP-004-1 report.

**f. System Conditions when a Loss of Load Caused by a Violation Occurs**

48. Based on the information described in the responses and comments to the February 26 Order, we conclude that the record in this matter, as supplemented, adequately describes the system conditions within the CAISO footprint and on the Turlock and Modesto transmission systems during the time period leading up to the load loss and the response to it. Nevertheless, the Notice's description of system conditions on the date of Turlock's vegetation contact was not clear. We expect that in future notices of penalty involving a loss of load resulting from a violation, the Regional Entity and NERC will clearly describe relevant system conditions and whether and, if so, how the unnecessary loss of load led to or required changes in these conditions. This description will help the Regional Entity and NERC determine the harm that resulted from the loss of load.

**g. "Human Error" Is Not a Factor**

49. APPA argues that when reviewing the Notice, we should consider that the vegetation contact and the placement of the switch at the Walnut station in the "off" position were "human error." Modesto disagrees with a description of the switch placement as human error. Whether or not these occurrences resulted from human error is not relevant to our consideration of this matter. Excusing Reliability Standard violations or lowering penalty amounts solely because of "human error" would remove an important incentive for compliance with the Reliability Standards.

50. Violations resulting from "human error" can lead to significant adverse effects to the BPS, including massive load shedding or load loss. The possibility of a significant monetary penalty for a violation of a Reliability Standard resulting from human error that adversely affects the BPS provides an incentive for registered entities to create and implement robust training and compliance programs and procedures to make human errors less likely. Merely because a violation resulted from human error, however, does not by itself warrant reduction of a penalty.

**3. Other Observations**

**a. Turlock's Current Compliance and Other Matters**

51. Based on the evidence submitted and Turlock and Modesto's 230 kV system's operating history, it appears that the primary protection system communication switch at the Walnut substation had been in the position in which it turned off the primary protection system for the Westley-Walnut line for some time. On any interconnected line between multiple entities that use a communication channel as part of the protection

system, the maintenance and testing program required by PRC-005-1,<sup>118</sup> coupled with the coordination requirements of PRC-001-1, should have been sufficient for either Turlock or Modesto to discover that the communication switch was set in this position. Had a comprehensive relay setting and testing program been in place that included an end-to-end test of the protective relays and associated communication channel equipment, the problem would have been discovered.

52. Since the alleged FAC-003-1 violation occurred in 2007, Turlock has added a jointly owned 230 kV line and two 115 kV transmission lines to its system. In light of the facts of this matter, we are particularly concerned whether sufficient measures have been taken to ensure that Turlock has appropriately re-evaluated its vegetation management program, is adequately aware of its relay schemes, has properly coordinated them with Modesto and others, and has factored those coordinated relay schemes into its planning and operations for all of its current BPS facilities. We also note that Turlock indicates that it co-owns with Modesto several transmission lines, including the two lines directly at issue in this matter.

53. Pursuant to FPA section 215(e)(3), the Commission may issue orders on our own motion requiring compliance with particular Reliability Standards. To help determine whether such an order is appropriate to address our concerns, the Commission directs WECC to perform a spot check of Turlock's continued compliance with requirements of four specific Standards: (1) FAC-003-1 R1 and R2; (2) PRC-001-1; (3) PRC-005-1; and (4) TOP-006-1 R3.<sup>119</sup> We require a spot check of FAC-003-1 to verify that Turlock is continuing to follow its transmission vegetation management plan and annual plan to maintain the required clearances. We believe that a spot check of PRC-001-1 is appropriate to ensure that Turlock has properly coordinated its Protection Systems on all current BPS facilities, especially with Modesto. A spot check also is appropriate for PRC-005-1 for assurance that Turlock is properly testing and maintaining its Protection Systems for all current BPS facilities, including its associated communication systems as defined in the NERC Glossary. A spot check is appropriate to ensure that Turlock is providing appropriate technical information concerning protective relays and their

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<sup>118</sup> PRC-005-1 R1 requires Turlock, as a transmission owner and a generator owner, to have a protection system maintenance and testing program for protection systems that affect the reliability of the bulk electric system. PRC-005-1 R2 requires Turlock to provide documentation of its protection system maintenance and testing program and the implementation of that program to WECC on request.

<sup>119</sup> The spot check should be performed pursuant to NERC's Rules of Procedure, which describe Spot Checking Process Steps. *See* NERC Rules of Procedure, Appendix 4C at § 3.3 (January 1, 2011).

functionality to operating personnel, as required by TOP-006-1 R3. As appropriate, in light of Turlock's dual ownership with Modesto of certain facilities, WECC may conduct corresponding spot checks of Modesto. We direct NERC and WECC to report the results of these spot checks to our staff within 60 days of the date of this order. Our staff will then recommend whether any further action is appropriate based on this report.

**V. Conclusion**

54. On the specific facts presented to us in the Notice, the February 24, 2010, supplemental filing, and the comments responding to the Commission's February 26 Order, we affirm the penalty in the Notice, effective on the date of issuance of this order.

The Commission orders:

(A) The penalty in this Notice is hereby affirmed, effective on the date of issuance of this order.

(B) WECC is hereby directed to perform spot checks of Turlock and, if appropriate, Modesto, and WECC and NERC are directed to report the results of the spot checks to the Commission staff within 60 days of the date of this order, all as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.