**via posting**

**TO:** Interested Industry Parties

**FROM:** Caroline Trum, NAESB Deputy Director

**RE:** Final Minutes from August 20, 2020 WEQ BPS Meeting

**DATE:** September 3, 2020

**WHOLESALE ELECTRIC QUADRANT**

**Business Practices Subcommittee Meeting**

**Conference Call**

**August 20, 2020 – 1:00 PM to 4:00 PM Central**

**FINAL MINUTES**

1. **Welcome**

Mr. Brooks welcomed the participants to the meeting. Ms. Trum provided the antitrust and meeting policies reminder. The participants introduced themselves. Mr. Brooks reviewed the agenda. The agenda was adopted by consensus

The participants reviewed the July 23, 2020 draft meeting minutes. A modification was made for accuracy. Mr. Wood moved, seconded by Mr. Phillips, to adopt the draft minutes as final. The motion passed a simple majority vote without opposition. The final minutes for the meeting are available at the following link: <https://naesb.org/pdf4/weq_bps072320fm.docx>.

1. **Discuss 2020 WEQ Annual Plan Item 8.a – Consistent with FERC Order No. 676-I, reconsider the reservation of WEQ-006 Manual Time Error Correction and determine if the standards should be retained or revised (see ¶46 – 47)**

Mr. Brooks stated that during the past several meeting, the subcommittee had developed proposed revisions to Version 003.1 of the WEQ-006 identified by the participants based on a review of the NERC Time Monitoring Reference Document – Version 5. He explained that these proposed revisions have been formatted into a draft recommendation with the Version 003.1 WEQ-006 standards identified for inclusion identified as new standards. Ms. Trum stated that this is consistent with the treatment of past reserved NAESB Business Practice Standards. Mr. Brooks suggested that any further modifications be applied to the new version of the draft recommendation. There was general agreement.

Mr. Reynolds stated that the WECC staff, in conjunction with the WECC Performance Working Group, which assists in time error activities and analysis for the Western Interconnection, had reviewed the draft recommendation and [proposed revisions](https://naesb.org/member_login_check.asp?doc=weq_bps082020w3.docx) to the standards. Mr. Brooks asked Mr. Reynolds to review the proposed revisions and accompanying [support documentation](https://naesb.org/pdf4/weq_bps082020w2.docx). Mr. Kirsch stated that as a member of the WECC Performance Working Group, he could also provide additional context to the proposed modifications.

Mr. Reynolds stated that the first proposed modification from WECC is to WEQ-006-3. Mr. Kirsch stated that the revision would clarify that a time error correction device only needs to be calibrated if the device requires calibration, explaining that within the Western Interconnection, the time monitoring equipment is not calibrated as the equipment does not require calibration. Mr. Wood supported the proposed revision but noted that the language would need to be modified to be consistent with NAESB standards language. Mr. Brooks suggested the inclusion of a URL to the website that NIST hosts for official time. These modifications were incorporated into WEQ-006-x14.

Mr. Reynolds stated that the remaining modifications proposed by WECC are to not include the language of WEQ-006-9 and WEQ-006-10 as well as remove references to the Western Interconnection from WEQ-006-5 as part of the draft recommendation as these standards are no longer reflective of the Western Interconnection practices regarding time error correction. He explained that consistent with NERC Reliability Standard BAL-004-WECC-2, the Western Interconnection now utilizes an automatic time error correction process. The NERC Time Monitoring Reference Document – Version 5 identifies CAISO-RC West as the time monitor for the Western Interconnection, which maintains the procedures for automatic time error correction and how manual time error corrections should be conducted if necessary. Mr. Reynolds stated that under WECC’s automatic time error correction process, corrections are not based on an accumulation of seconds while manual time error corrections can be initiated for reliability concerns or other unforeseen reasons. He explained that the timing thresholds for identified in the table in WEQ-006-5 for the initiation and termination of a slow and fast correction could cause issues with the Western Interconnection’s management of its automatic time error correction process and inadvertent interchange. Mr. Wood asked how the Western Interconnection manages time error if corrections are not based on accumulation of seconds. Mr. Reynolds stated that within the Western Interconnection, entities are mandated to participate in automatic time error correction by NERC Reliability Standard BAL-004-WEQ-2. This process addresses primary inadvertent interchange through the use of an equation which accounts for delta time (time error) for the previous hour and the next hour. Mr. Reynolds stated that by tracking primary inadvertent interchange through the automated time error correction process, the Western Interconnection has been able to find metering errors that are impacting time error and correct those reliability issues. He stated that based on data collected and analyzed by the WECC Performance Managing Working Group, this method is more effective at managing time errors for the Western Interconnection than manual time error correction.

Mr. Phillips expressed support for removing specific references to the Western Interconnection within the standard, explaining that this change would support consistency as the standards do not specifically reference the other interconnections. He suggested that the standards should focus on generally applicable requirements for any entities that may perform manual time error correction.

Mr. Wood suggested that WEQ Business Practice Standards addressing manual time error correction are not needed as the Western Interconnection no longer performs manual time error correction and NERC, with the retirement of NERC Reliability Standard BAL-004, determined that no interconnection needs to perform manual time error corrections for reliability purposes. Mr. Phillips stated that during the May 22, 2020 meeting, MISO provided a [presentation](https://naesb.org/pdf4/weq_bps052220w6.pdf) regarding the use of manual time error correction within the Eastern Interconnection. He explained that based on the presentation and resulting discussion that manual time error corrections are still used within the Eastern Interconnection to account for significant drifts in generation for which the cause is currently unknown, there was general consensus among the participants that business practice standards would be necessary at this time. Mr. Wood stated that some entities within the Eastern Interconnection do not support the continued use of manual time error corrections as the issues regarding generation within the Eastern Interconnection can be better resolved through inadvertent interchange.

Ms. Welch stated that if the subcommittee decides to develop a no action recommendation, then there needs to be documented justifications regarding the determination that business practice standards are not necessary. Mr. Wood stated that the same justifications used for retiring the NERC Reliability Standard can be used for not including additional WEQ Business Practice Standards. He stated that manual time error corrections are causing disruptions in frequency which puts entities in conflict with OATT requirements. Mr. Swan stated that the data provided by the WECC could be useful in providing a justification as to why NAESB standards addressing manual time error correction are no longer needed. Mr. Reynolds responded that the data included in the support document provided by WECC was provided only to demonstrate that the Western Interconnection is effectively managing time error through its automated time error correction process as established by mandatory reliability requirements found in NERC Reliability Standard BAL-004-WECC-2. He stated that other interconnections may still need manual time error corrections.

Mr. Phillips stated that the participants had spent the past several meetings developing a recommendation based on the general consensus that business practice standards addressing manual time error correction are still needed as currently, the Eastern Interconnection is using manual time error corrections due to the wide deviations in generation. He expressed concern a no action recommendation would contradict this prior determination. Mr. Wood stated that under the timing table included in WEQ-006-5, the Eastern Interconnection is initiating corrective action for slow/fast time error at ±10 seconds and terminating corrective action for slow/fast time error at ±6 seconds, explaining that the quickness in which a correction is issued masks the true source of the issue. He suggested that drifts in generation will be better addressed solely through inadvertent interchange. Mr. Phillips stated that the new timing table proposed in WEQ-006-x15 expands the initiation of corrective action to ±30 seconds and the termination of corrective action to ±25 seconds. He explained that this is intended to accommodate the need for more time before issuing a manual time error correction to help identify the source of the drift in generation through inadvertent interchange. Mr. Swan expressed support for retaining NAESB standards that address manual time error correction and expanding the initiation/termination windows. He stated that this is a more prudent way forward and that once the cause of generation drifting is identified and corrected, the industry can discuss the need for continuing to maintain manual time error correction business practice standards. Ms. Welch agreed, stating that the identification and correction of the root cause of the error in inadvertent interchange within the Eastern Interconnection would likely be sufficient justification to discontinue the need for business practice standards addressing manual time error correction.

Mr. Wood stated that the Western Interconnection can be considered a use case to demonstrate that drifts in interchange can be solely corrected through management of inadvertent interchange, eliminating the need for manual time error corrections. Mr. Brooks agreed, stating that the data provided by the Western Interconnection demonstrates that primary inadvertent interchange can be properly managed even if there are still deviations in time. Mr. Reynolds noted that the graph included in the WECC work paper has different scales for the left side, which represents primary inadvertent interchange in MWh, and the right side, which represents time error in seconds. Period 2 on the graph represents the time period over which a cap to the amount of primary inadvertent interchange that a balancing authority can accumulate over time as well as the start of the automatic time error correction process under NERC Reliability Standard BAL-004-WECC-2. This led to greater consistency between primary inadvertent interchange and time error. Period 3 on the graph represents the time period for which the Western Interconnection was still performing manual time error corrections in addition to automatic time error corrections but expanded the manual threshold from ±5 seconds to ±30 seconds. This allowed automatic time error corrections to operate more effectively, reducing the number of manual time error corrections that were needed. Mr. Reynolds stated that WECC Performance Working Group is currently working to determine modifications to the automatic time error correction process to bring time error and primary inadvertent interchange back in synchronization but that consistently having to perform manual time error corrections will interfere with this process. He explained that while there is a deviation that is being addressed, the current automatic time error process allows the Western Interconnection to maintain time error with an approximate one-and-a-half-minute band range. Mr. Kirsch agreed, stating that the implementation of the automatic time error correction process has been a success within the Western Interconnection.

Mr. Swan stated unlike the Western Interconnection which has its automatic time error correction process, the Eastern Interconnection does not have a similar check on time error. He explained if the manual time error corrections are discontinued, then if there was a metering problem, the issue could go undetected and cause additional problems within the Eastern Interconnection.

The participants worked on modifications to incorporate the proposals from WECC as well as to clarify that the standards language is only applicable to entities that perform manual time error corrections. Mr. Delparte moved, seconded by Mr. Kirsch, to adopt the changes as recommended in the WEQ-006 standards to be included in the draft recommendation. The motion passed a simple majority vote without opposition.

Mr. Brooks asked the participants how they wanted to proceed. Mr. Phillips suggested that the participants review the draft recommendation as revised during the meeting internally within their companies. The subcommittee will continue discussions on this issue during the next meeting.

The draft recommendation as revised during the meeting is available at the following link: <https://naesb.org/member_login_check.asp?doc=weq_bps082020a1.docx>.

1. **Discuss Standards Request R20008 – Request to update WEQ-005 Area Control Error (ACE) Equation Special Cases to account for modifications to the NERC Dynamic Transfer Reference Document Version 4**

Mr. Brooks stated that during the previous meeting, Ms. Trum had taken an action item regarding the coordination between NAESB and NERC in the development of the WEQ-005 ACE Equation Special Cases Business Practice Standards. Ms. Trum stated that the WEQ-005 standards were developed in coordination with NERC as part of Version 0 of the WEQ Business Practice Standards and were subsequently modified as part of WEQ Version 002. The NAESB standards were developed to support and complement the NERC Reliability Standard BAL-005 Balancing Authority Control Reliability Standards. The current effective version of this mandatory reliability standard is BAL-005-1. Additionally, language on the NERC website specifically directs entities to the WEQ-005 Business Practice Standards as complementary to the NERC BAL-005 Reliability Standard.

Mr. Wood suggested that the subcommittee review the NERC equation for ACE to determine if the equation has been modified to account for JOUs. Mr. Kirsch stated that the ACE equation is contained within the NERC Glossary and supported by the NERC Dynamic Transfer Reference Document – Version 4.

1. **Next Steps/Review Action Items**

The next meeting of the subcommittee is a conference call scheduled for September 10, 2020.

1. **Adjourn**

The meeting adjourned at 3:58 PM Central by consensus.

1. **Attendance**

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| **First Name** | **Last Name** | **Organization** |
| Kokou | Agbassekou | CAISO |
| Oluwaseyi | Akinbode | MISO |
| Sandra | Anderson | CAISO |
| Rob | Arbitelle | Southern Company |
| Tim | Beach | CAISO |
| Greg | Berglund | CAISO |
| Greg | Boness | MISO |
| Jim | Bostwick | MISO |
| Dick | Brooks | Reliable Energy Analytics  |
| Sirajul | Chowdhury | CAISO |
| Dave | Delparte | CAISO |
| Patrick | Foley | NV Energy |
| Karen | Frank | MISO |
| Tina | Gary | Portland General Electric |
| Cory | Herbolsheimer | NV Energy |
| Alan | Johnson | NRG |
| Derrick | Kitchens | Southern Company |
| Dave | Kirsch | BPA |
| Cheryl | Mendrala | ISO-NE |
| Chris | Norton | American Municipal Power |
| Joshua | Phillips | SPP |
| Nick | Quinata | BPA |
| Robin | Rebillard | Manitoba Hydro |
| Tim | Reynolds | WECC |
| TW | Right | MISO |
| John | Spomer | CAISO |
| Mike | Steigerwald | BPA |
| Steve | Swan | MISO |
| Caroline | Trum | NAESB |
| Bobbi | Welch | MISO |
| JT | Wood | Southern Company |