

Individual or group. (24 Responses)
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Individual
Nick Vtyurin
Manitoba Hydro
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.
Yes
Yes
Group
Bonneville Power Administration
Andrea Jessup
Maintain the ability to implement manual TEC with requirements similar to those proposed.
BPA does not find manual TEC to be a burden and unless shown to be unnecessary by studies, should be maintained.
Yes
Yes
Individual
Matt Smelser
Imperial Irrigation District
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.

Yes
No
Individual
John Tolo
Tucson Electric Power
Maintain the ability to implement manual TEC with requirements similar to those proposed.
In agreement that BAL-004 can be eliminated but retain the ability to do a manual time error correction outside of a Reliability Standard. When implementing a manual time error correction, strive for less of a reliability impact by narrowing the frequency offset band. Make certain that there is a distinction between manual time error correction (MTEC) and automatic time error correction (ATEC) as it is a regional standard in the WECC.
Yes
No
Look at other means of accomplishing manual time error corrections without having a Reliability Standard associated with that practice. Maybe look at a NAESB Business Practice or a Guideline of some sort.
The ability for comment and input is appreciated.
Individual
dan Roethemeyer
Dynegy
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.
Yes
Yes
Individual
Maryclaire Yatsko
Seminole Electric Cooperative, Inc.
Maintain the ability to implement manual TEC with requirements similar to those proposed.
Yes

Yes
Individual
Kathleen Goodman
ISO New England Inc
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.
ISO-NE believes that this should no longer be a standard, and, if needed, a NAESB business practice
Individual
Terry Bilke
MISO
Maintain the ability to implement manual TEC with requirements similar to those proposed.
We disagree with the assertion that Order No. 693 clearly states we have to follow a mandated path. NERC is allowed to point out technical deficiencies based on new information or provide equally effective alternatives. NERC standards should set a maximum allowable offset for TECs. NERC should remove some of the overhead of TECs in the standards. For example, there are procedural steps regarding TECs in the NERC Operating Manual that work quite effectively. Most of what we do today regarding TECs could be in a procedural document in the NERC Operating Manual. While giving it to NAESB might work, there would be gaps in that not all BAs are FERC jurisdictional transmission providers. Additionally there are viable and useful things NERC could do to reduce the number and impact of manual TECs and make them less error prone (full day corrections at a 0.0Hz offset with the ability to do small unilateral paybacks that help manage time).
No
Only 1 RC should issue TECs. R2 isn't necessary. Additionally, you could just put a requirement in BAL-004,5 or 6 that the maximum frequency offset for an RC issued TEC is +/- 0.02 Hz.
No
No, just because Commission Staff erred in overestimating the impact of TECs, does not mean we should propagate that misunderstanding.
Manual TECs have become infrequent events in the East. We could further improve control, better manage Inadvertent Interchange, and improve the frequency profile if we made a few simple changes (clock day corrections with a 0.01Hz offset, 30 second TEC window, allow unilateral payback of 5MW or 10% of bias if it assisted in managing Time Error).
Individual
Craig Figart
Avista Corp

Maintain the ability to implement manual TEC with requirements similar to those proposed.
Yes
not sure
Now that WECC has widened our Time Error Correction window from +/-5 to +/-30 seconds, I would like to continue to monitor how effectively ATEC manages automatically manages Time Error and payback of Primary and Total Inadvertent Interchange energy. The number of MTECs have already been significantly reduced as a result. MTECs keep Time Error bounded within existing WECC Interconnection Time Monitor's Symmetricom clock capabilities of +/-99 seconds. Without MTECs, modifications to current Time Error calculation processes and software would have to be devised and implemented (i.e. WIT Tool software, WECC's ITM Time Error calcs, each BA's ATEC calculations, etc).
Individual
Oliver Burke
Entergy Services, Inc.
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.
Entergy is in favor of eliminating Time Error Corrections. This practice has become outdated and inefficient as the advancements of today's technology has eliminated the need for such practices.
No
Yes
Individual
Angela P Gaines
Portland General Electric
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.
No
There is no need to maintain Manual Time Error Correction.
From a reliability of the interconnection perspective, BAL-004-0 serves no purpose. The only positive impact that it has is for clocks and timing devices that rely on the frequency of the grid to maintain an accurate time which are probably few and minimally impacted. There is no need to maintain Manual Time Error Correction (TEC). Get rid of this standard.
Group
Northeast Power Coordinating Council

Guy Zito
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.
We support the elimination of BAL-004 and its requirement to perform time error correction since time error correction is not necessary to maintain reliability. This should no longer be a standard, and if determined to be needed, should be made a NAESB business practice.
Yes
Yes
Individual
Joel Wise
Tennessee Valley Authority
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.
TVA supports the elimination of the ability to implement manual TEC and the Reliability Standard BAL-004-0.
Individual
David Kimmel
PJM Interconnection
Maintain the ability to implement manual TEC with requirements similar to those proposed.
R1 has some unclear language. It states that the Reliability Coordinator will issue an Operating Instruction to its Balancing Authorities that will include the time to implement the offset. Does this include the termination time of the TEC? Usually a termination time is issued later into the Time Error Correction once Time Error has been reduced to a lower value. An R3 should be written to allow Reliability Coordinators to request to terminate a manual Time Error correction that is in progress or that is scheduled to start if they have reliability considerations.
No
The process to determine and agree on a termination time is unclear. As it is written, Reliability Coordinators do not appear to have authority to issue a manual Time Error Correction termination when the Time Error has returned to a near zero value. Any Reliability Coordinator in an Interconnection should have the authority to request the other Reliability Coordinators within its Interconnection to terminate a manual Time Error Correction in progress or cancel a scheduled manual Time Error Correction that has not begun, for reliability considerations.
Yes

Individual
Glenn Barry
LADWP
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.
Yes
Yes
Individual
David Jendras
Ameren
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.
No
In addition to the proposed requirements a +/- limit on frequency offset should be set, such as +/- 0.010 Hertz.
Yes
Individual
LeRoy Patterson
GCPD
Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.
Manual Time Error corrections create reliability risk by intentionally offsetting frequency (moving frequency closer to manual load shed points) to compensate for past poor frequency performance. Instead of manual time error corrections, mandate or incent suitable frequency performance at all times rather than causing intentional frequency offsets to "adjust" time error.
Yes
Yes
Manual time error correction creates reliability issues. Inadvertent accumulations should be managed without manual time error corrections. If time error must be managed to zero over time, then automatic time error correction methods that reduce inadvertent accumulations while supporting 60 Hz frequency should be used rather than manual corrections that intentionally offset frequency.

Individual
Ernesto Martinez
El Paso Electric Company
Maintain the ability to implement manual TEC with requirements similar to those proposed.
Yes
Yes
Group
ISO/RTO Standards Review Committee
Albert DiCaprio
The ISO/RTO SRC members believe that Time Error Correction does not rises up to the level of a NERC Reliability Standard level and that BAL-004 should be retired and either be referred to NAESB for its consideration as a Business Practice or converted to a NERC reference document (e.g. Operating Guideline)
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No
The ISO/RTO SRC members believe that Time Error Correction does not rises up to the level of a NERC Reliability Standard level and that BAL-004 should be retired and either be referred to NAESB for its consideration as a Business Practice or converted to a NERC reference document (e.g. Operating Guideline)
Group
SPP Standards Review Group
Jason Smith
Maintain the ability to implement manual TEC with requirements similar to those proposed.
We agree that coordinated, manual frequency offsets may need to be implemented, but only for non-BES reliability purposes. The question of whether or not TEC, or manual frequency offsets, is needed is a non-electric industry question and should be directed to those entities. If those entities agree that TEC is still needed, then at minimum some coordination and oversight should remain. However, placing this obligation to coordinate activities for a non-BES reliability issue in NERC Reliability Standards is a mis-placement of the issue. An un-coordinated, manual frequency offset would only result in inadvertent interchange between Balancing Authorities which itself is not a reliability issue. Simply offsetting a BA's target, scheduled frequency will not result in direct reliability impacts. The interconnections between

BAs in today's world are much stronger than they were 25-30 years ago. When TECs were originally implemented and BAs were only interconnected by minimal ties, the impact of frequency offset, and the resulting inadvertent interchange, would have been much more impactful. In today's interconnections, the ties are much stronger and BAs generally have many ties with the rest of the interconnection. The amount of inadvertent interchange between BAs due to an uncoordinated offset would result in only minimal amounts of MWs on those ties and should not be characterized as a reliability issue.

Yes

There are no reliability issues associated with an uncoordinated manual Time Error Correction. Only the possibility of introducing inadvertent interchange between Balancing Authorities is introduced. While we feel there are no reliability issues, the proposed requirements are sufficient to coordinate manual frequency offsets.

Yes

We feel that this does not belong in Reliability Standards at all. Coordinating TEC's purpose would be only to minimize the creation of inadvertent interchange. However, if it is determined that the implementation of TEC is maintained within the Standards, placing it in the IRO family of Standards would be appropriate.

Group

Southern Company

Bob Schaffeld

Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.

Yes

It seems the requirement should be on the RCs in the interconnection, not the Interconnection RC Time Monitor (that rotates among the different RCs in the Interconnection periodically). How would the Interconnection Time Monitor RC prove compliance with this requirement? It would be easier for the 'local RC's to prove that their instructions match the one issued on the Interconnection Time Monitor. We suggest the standard be written in this manner, "Operating Instructions issued by the RCs in the same Interconnection must match the Operating Instruction issued by the Reliability Coordinator related to a manual Time Error Correction for that Interconnection".

Yes

Group

ACES Standards Collaborators

Brian Van Gheem

Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.

Our preference is to eliminate the standard entirely, as we feel it puts an undue risk on the reliability of the BES. An Interconnection under a Fast Time Error Correction that suddenly loses a large generation resource increases the probability of a frequency excursion occurring below 59.95 Hz. We struggle to identify any reliability reasons why an entity would offset their scheduled frequency for this purpose. Previous positions that support the use of Time Error Corrections focus on maintaining the time accuracy of the remaining synchronous motor electric clocks still in use. However, we continue to find flaw with such arguments, as the corresponding NAESB Standard identified that the Interconnection Time Monitor should make a reasonable effort to initiate and terminate a corrective action order within a specific tolerance. Over the past decade, Industry has moved on to more accurate methods for keeping time instead of synchronous motor electric clocks. Moreover, Industry is often accused of not updating its facilities to 21st century standards and expectations, yet the purpose of Time Error Correction is to help a clock invented in the early 20th century stay accurate.

No

(1) We have concerns that NERC and the SDT has posted an incomplete package of documents (e.g. missing implementation plan, missing VSLs in standard, etc.) for review. We understand the SDT's intention to move this standard under the IRO set of standards. However, based on the significant depth of this survey and its request to review a proposed standard, Industry is still obligated to follow its internal standards development and commenting mechanism based on the materials provided. (2) We applaud the SDT for removing Balancing Authorities from the applicability of this standard. However, we are concerned that Requirement R1 doesn't clearly identify one Reliability Coordinator as the Interconnection Time Error Monitor. Without having one entity identified to take the lead and responsibility for initiating a Time Error Correction, this could cause additional burden on tracking and coordination to when the initiation should occur and by whom. We recommend identifying a standard-specific definition for Interconnection Time Error Monitor that identifies a NERC Technical Committee (i.e. NERC Operating Committee) to assign these responsibilities to a specific Reliability Coordinator on a periodic basis. (3) We recommend Requirement R1 is revised to the develop-maintain-implement approach used for Geomagnetic Disturbances in Reliability Standard EOP-010-1. Reliability Coordinators already provide some guidance within their Reliability Plans on how they will communicate the initiation of Time Error Corrections. Operating Procedures and Operating Processes could further support the need for additional information. (4) We question how a CEA would enforce Requirement R2, as written. An auditor could interpret that the Reliability Coordinator who issues the initiation of a Time Error Correction would also be responsibility for all other Reliability Coordinators within its Interconnection to issue the same Operating Instructions. We recommend rewording the requirement to "Each Reliability Coordinator shall communicate identical Operating Instructions for Time Error Corrections issued by other Reliability Coordinators within the same Interconnection."

Yes

Although we agree with this recommendation, we caution the SDT that the IRO standards recently went through extensive revisions and any further revisions should be narrow in scope.

We believe that NERC should build a stronger case for the removal of the Time Error Correction standard. This standard puts unnecessary maintenance costs related to software and implementation of Time Error Correction operations. It also puts a burden on Reliability Coordinators to identify the initiation and termination of Time Error Corrections as reliability-related tasks, which then are required training for System Operators, per NERC Standard PER-005-1.

Group

Duke Energy

Colby Bellville

Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.

Group

Peak Reliability

Jared Shakespeare

Eliminate the ability to implement manual TEC and standard BAL-004-0 Time Error Correction.

Peak Reliability (Peak) is in favor of retiring BAL-004-0 as it is a legacy commercial service. Peak does not support keeping a process for implementing manual time error correction as a standalone standard. The existing suite of BAL Reliability Standards should keep frequency within proper bounds to create a reliable Interconnection (BAL-001 and BAL-003 in particular). Additionally, Reliability Coordinators have other mechanisms to manage frequency drift (ACE, interchange, etc.). Manual Time Error Correction is not, nor should it be, one of these mechanisms.