

WECC PROCEDURE FOR  
TIME ERROR CONTROL

On August 9, 1988 the WSCC Board of Trustees approved a procedure requiring all control areas to participate in modified automatic time error control. This procedure was suspended on October 1, 1997 until such time that it could be coordinated with NERC Control Performance Standards (CPS1 and CPS2). A full and complete revision of time error control, coordinated with primary inadvertent interchange payback, is now available. It addresses the continuing concern that numerous manual time error corrections are detrimental to interconnected operations. The procedure is as follows:

1. The amount of any control area's time error contribution is determined by the control area's bias setting, the control area's accumulation of primary inadvertent interchange, and the hourly change in time error.
  - a) A control area will participate in time error control at all times.
    1. The control area time error bias, in megawatts, shall be its current<sup>\*</sup> accumulation of primary inadvertent interchange divided by the control area (proportional bias contribution times correction time period in hours). See the description of the WECC ACE equation.
    2. The amount of time error contribution is limited to the control area's allowable ACE limit for CPS2 defined by its  $L_{10}$ .
    3. The time error bias term shall not be used in ACE when determining CPS compliance. It shall be used in the control or processed ACE only.
  - b) Control areas will continue to comply with item 1.a during periods of manual time error correction.
2. At least once each day, every control area will synchronize its time error to the nearest 0.001 seconds with the system time error as determined by the WECC Time Monitor.
  - a) Daily, the WECC Time Monitor (California Independent System Operator) will read the value of system time error at 14:00:00 hours Pacific Prevailing time and broadcast it to all control areas by 14:15 hours Pacific Prevailing time through the WECCNet Communication System, described in the WECC OC Handbook.
  - b) Each control area will synchronize its time error to the nearest 0.001 seconds of the system time error by comparing its reading at 14:00:00 hours to the reading broadcast by the Time Monitor; any difference is to be applied as an adjustment to its current time error.

3. When a manual correction for time error is announced, the Time Monitor shall:
  - a) Specify the start time,
  - b) Specify the frequency offset,
  - c) Specify the scheduled frequency.
  
4. Any control area that removes the automatic time error feature from service, other than for routine maintenance, should notify all other control areas through the WECCNet Communication System.

\* Current means that the on-peak accumulation is used during on-peak periods and the off-peak accumulation is used during off-peak periods.

Approved by Compliance Monitoring and Operating  
Practices Subcommittee: January 10, 2002

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