Description of cumulative DOE-2.3 version 50e bug fixes (since initial public release of version 49c):

1. There are no current bug fix items since version 49c is the initial public release of DOE-2.3.
2. In version 049e: 1) The zone keywords MAX-HEAT-RATE and MAX-COOL-RATE were correctly implemented into the design airflow calculations, but were not fully integrated with zonal reheat coil sizing (similar for IU zonal recool coil). A reheat coil could be either undersized of oversized; if undersized then the zone may be underheated, particularly during startup hours.
3. In version 050d: 1) Continued development of dual-mode VRF system 2) Addition of dedicated outdoor air system (DOAS). Ported energy-recovery ventilator from 2.2 3) Changed default of MIN-FLOW-RATIO for UHT, UVT, FC, HP systems from variable flow to constant flow. 4) Added sizing specification method for heating coils 5) Added fan-assisted natural ventilation 6) Added schedule capability for design-day weekends vs. weekdays 7) Allow user to specify wall inside convective film resistance (default is for cooling) 8) Allow humidification/dehumidification control based on max/min dewpoint 9) The snap type schedule failed to snap to the default value when the schedule was undefined 10) A check was added to ensure that the weather-file drybulb temperature was never less than the dewpoint. 11) The PredictX parabolic solution now uses double precision 12) Several bug fixes implemented to avoid run-time errors. 13) The SUM system is now enabled. 14) Convergence failure notifications have been revised to show the total number of failures only rather than each incidence. 15) Expressions for HEAT-REJECTION:AUX-ELEC keywords have been fixed.
4. In version 050e: 1) Several bug fixes to the new heat recovery VRF system have been implemented