

Performance of the Transverse Coupled-Bunch Feedback System in the SRRC, K.T. HSU, C.C. KUO, and K.K. LIN, Synchrotron Radiation Research Centre, Hsinchu 30077, Taiwan, R.O.C.; W.T. WENG, AGS Department, Brookhaven National Laboratory, U.S.A. - A transverse feedback system has been implemented and commissioned in the SRRC storage ring to suppress coupled-bunch oscillations of the electron beam. The system includes transverse oscillation detectors, notch filter, baseband quadrature processing circuitry, power amplifiers, and kickers. To control a large number of transverse coupled-bunch modes, the system is broad-band, bunch-by-bunch in nature. Because the system is capable of bunch-by-bunch correction, it can also be useful for suppressing instabilities introduced by ions. If this is proven to be effective, the sextupole strength can be reduced to improve dynamic aperture and hence the lifetime of the storage ring. Commissioning results and operation experiences will be presented.