More and more evidence indicates a strong correlation between impulsive solar energetic particle (SEP) events and the magnetic reconnections in the vicinity of flaring active regions (ARs). However, it is still not clear how they are related to each other. We present the investigation of the AR 10939, which produced two B-class flares, accompanied by narrow coronal mass ejections (CMEs) and successive beam-like electron events on 24 January 2007. Using in situ electron observations from ACE/EPAM and WIND/3DP, and imaging data from Hinode/EIS, RHESSI, and TRACE, coupled with magnetic modeling, we could establish the correlations of the coronal magnetic topologies, jet activities, and the accelerations of impulsive electrons.