

ABSTRACT

COMBINED OPEN LOOP/CLOSED LOOP (CQI-BASED) UPLINK TRANSMIT POWER CONTROL WITH INTERFERENCE MITIGATION FOR E-UTRA

A combined open loop and closed loop (channel quality indicator (CQI)-based) transmit power control (TPC) scheme with interference mitigation for a long term evolution (LTE) wireless transmit/receive unit (WTRU) is disclosed. The transmit power of the WTRU is derived based on a target signal-to-interference noise ratio (SINR) and a pathloss value. The pathloss value pertains to the downlink signal from a serving evolved Node-B (eNodeB) and includes shadowing. An interference and noise value of the serving eNodeB is included in the transmit power derivation, along with an offset constant value to adjust for downlink (DL) reference signal power and actual transmit power. A weighting factor is also used based on the availability of CQI feedback.

Fig 1