$$\dot{Q}_{h}^{k=2}\left(T_{j}\right)=\dot{Q}_{hp}^{k=2}\left(T_{j}\right)+\dot{Q}_{CC}^{k=2}\left(T_{j}\right)$$

$$\dot{E}_{h}^{k=2}\left(T_{j}\right)=\dot{E}_{hp}^{k=2}\left(T_{j}\right)+\dot{E}_{CC}^{k=2}\left(T_{j}\right)$$