Sample_hevc_fei_abr is an application which demonstrates usage of FEI technology in transcoding scenarios. Look ahead bitrate control in sample uses mean squared error estimation implemented on base of following paper:

B. Lee and M. Kim, "No-Reference PSNR Estimation for HEVC Encoded Video," in *IEEE Transactions on Broadcasting*, vol. 59, no. 1, pp. 20-27, March 2013.
doi: 10.1109/TBC.2012.2226533
URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6373710&isnumber=6469242

Several additional improvements were introduced to algorithm: adjustment of scaling coefficient for intra MSE, accurate MSE calculation for skip blocks with multiple references, usage of MSE of previous frame on frames with small amount non-zero transform coefficients.