PDH mechanism con't.

Transfer of OH-ethyl (derived from pyruvate; in red) to the sulfhydryl head group of lipoic acid. Note the oxidation state of each sulfur before attack by OH-ethyl is "+3 e's". After attack, each is +4 e's. Thus 2 e's have been transferred constituting the 2e-reduction of lipoic acid.

Voet & voet 3rd ed.