

l_before-es-before-iff^{11,40}

$\forall the_es: \text{event_system}\{i:l\}, e, e', y: \text{es-}E(the_es).$
 $l_before(e'; y; \text{before}(e); \text{es-}E(the_es))$
 $\iff (\text{es-locl}(the_es; e'; y) \wedge \text{es-locl}(the_es; y; e))$