causal-p-predecessor[11,40]

$\forall es$:ES, P:(E$\rightarrow \mathbb{P}$).
($\forall e$:E. Dec($P(e)$))
$\Rightarrow$ ($\forall e$:E.
  ($\exists e'$:E. (($e' < e$) & $P(e')$))
  $\Rightarrow$ ($\exists e'$:E. (($e' < e$) & $P(e')$ & ($\forall e''$:E. ($e' < e''$) $\Rightarrow$ ($e'' < e$) $\Rightarrow$ ($\neg P(e'')$))))))

http://www.nuprl.org/FDLcontent/p0_963683_/p0_548910_{causal-p-predecessor}.html