chain-order-implies-before[13,45]

$\forall es$:ES, Cmd:Type, In:AbsInterface(Cmd), $isupdate$:($Cmd \rightarrow \mathbb{B}$), Sys, Out:AbsInterface(Top).
(E(In) $\subseteq$r E(Sys))
$\Rightarrow$ ($\forall f$:sys-antecedent(es;Sys), $chain$:(E(Sys)$\rightarrow$(Id List)).
chain-consistent(f;$chain$)
$\Rightarrow$ ($\forall x$, y:Id.
$x << y \Rightarrow$ ($\forall e$:E(Sys). ($x \in chain(e)$) $\Rightarrow$ ($y \in chain(e)$) $\Rightarrow$ x before $y \in chain(e)$))))

---

http://www.nuprl.org/FDLcontent/p0_963683_/p39_428045_{chain-order-implies-before}.html