Inference at $*$ 2 1
of proof for Lemma absval_elim:

1. $P : \mathbb{Z} \to \mathbb{P}$
2. $\forall x{:}\mathbb{N}.\ P(x)$
3. $x : \mathbb{Z}$

$\vdash P(\text{if } 0 \leq\text{z } x \text{ then } x \text{ else -}x \text{ fi })$

by InteriorProof ((((BoolCasesOnCExp 0 $\leq$z x)
CollapseTHENM (AbReduce 0))$\cdot$)

CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))$\cdot$

1:

4. $0 \leq x$

$\vdash P(x)$

2:

4. $x < 0$

$\vdash P(\text{-}x)$

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_73055_{absval_elim}2_1.html