```
absval_assoced  THM

⊢  ∀a:ℤ. |a| ∼ a  by RepD THEN (Unfold ‘absval‘ 0)
|
1. a : ℤ
⊢  if 0≤₂a→ a else -a fi ∼ a  by SplitOnConclITE
|
|\
| .....truecase .....
| 2. 0≤a
| ⊢  a ∼ a
|   by BackThru Thm* ∀a,b:ℤ. a = b ⇒ (a ∼ b)    {assoced_weakening}
|
.\
. .....falsecase .....
. 2. a<0
. ⊢  (-a) ∼ a  by BackThru Thm* ∀a:ℤ. (-a) ∼ a    {neg_assoced}
END
```