```
every_el  THM

⊢  ∀'a:S, l:'a List, P:('a→𝔹).
|  every(P;l) ⟺ (∀n:ℕ. n<||l|| ⇒ P(l[n]))
| by RewriteOfThm
|    Thm* ∀'a:S.
|         all
|         (λl:hlist('a). all
|                        (λP:'a → hbool. equal
|                                         (every(P,l)
|                                         ,all
|                                          (λn:hnum. implies
|                                                    (lt(n,length(l))
|                                                    ,P(el(n,l)))))))
|    {hevery_el}
|    (WOSimpC (ioid !oid{hel simp update:s})
|     (SimpsetC [`hol_to_nuprl`;`bequal`]))
|    THEN
|    Try (Complete Auto)
|
1. ∀'a:S, l:hlist('a), P:('a→𝔹).
   every(P;l) ⟺ (∀n:hnum. n<||l|| ⇒ P(el(n,l)))
⊢  ∀'a:S, l:'a List, P:('a→𝔹).
   every(P;l) ⟺ (∀n:ℕ. n<||l|| ⇒ P(l[n]))  by HN
END
```