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hanoi_seq_deepen_loweq  THM

⊢  ∀a,z:ℤ, n:ℕ, s:({a...z}→{1...n}→Peg), n':ℕ.
|  n≤n'
|  ⇒
|  (∀h:({n+1...n'}→Peg), i:{1...n'}.
|   i≤n ⇒ (∀x:{a...z}. (s(?) {to n} ⊕ h {to n'})(x,i) = s(x,i)))
| by Compute
|      ⌈(s(?) {to n} ⊕ h {to n'})(x,i)⌉
|      *⇒
|      (s(x) {to n} ⊕ h {to n'})(i)
|
1. a : ℤ
2. z : ℤ
3. n : ℕ
4. s : {a...z}→{1...n}→Peg
5. n' : ℕ
6. n≤n'
7. h : {n+1...n'}→Peg
8. i : {1...n'}
9. i≤n
10. x : {a...z}
⊢  (s(x) {to n} ⊕ h {to n'})(i) = s(x,i)
  by BackThru:
     Thm*  ∀n:ℕ, f:({1...n}→Peg), n':ℕ.
           n≤n'
           ⇒
           (∀f':({n+1...n'}→Peg), i:{1...n'}.
            i≤n ⇒ (f {to n} ⊕ f' {to n'})(i) = f(i))
     {hanoi_extend_loweq}
END
```