```
factorial_tail_via_iter_wf  THM

⊢  ∀m,k:ℕ. k!m ∈ ℕ  by Def of k!m THEN UnivCD
|
1. m : ℕ
2. k : ℕ
⊢  (Π i:{k-m..k⁻}. i+1) ∈ ℕ  by Decide: k-m<0
|
|\
| 3. k-m<0
| ⊢  (Π i:{k-m..k⁻}. i+1) ∈ ℕ
| | by Guarding (Π i:{k-m..k⁻}. i+1) Analyze ...ℕ
| |
| .....set predicate .....
| ⊢  0≤(Π i:{k-m..k⁻}. i+1)
| | by Rewrite by
| |    Thm*  (∃i:{a..b⁻}. e(i) = 0) ⇒ (Π i:{a..b⁻}. e(i)) = 0
| |    {zero_ann_iter_via_intseg} ...ℕ
| |
| .....rewrite subgoal .....
| ⊢  ∃i:{(k-m)..k⁻}. i+1 = 0  by Witness: -1 ...ℕ
|
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. 3. ¬k-m<0
. ⊢  (Π i:{k-m..k⁻}. i+1) ∈ ℕ  by Autoℕ
END
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