```
reduce_factorization_wf  THM

⊢  ∀a,b:ℤ, f:({a..b⁻}→ℕ), j:{a..b⁻}.
|  0<f(j) ⇒ reduce_factorization(f; j) ∈ {a..b⁻}→ℕ
| by Def of reduce_factorization(<term>; <term>)
|    THEN
|    Guarding if <bool>→ <*> else <else> fi Auto
|
1. a : ℤ
2. b : ℤ
3. f : {a..b⁻}→ℕ
4. j : {a..b⁻}
5. 0<f(j)
6. i : {a..b⁻}
⊢  if i=₂j→ f(i)-1 else f(i) fi ∈ ℕ  by SplitOnConclITE
|
.....truecase .....
7. i = j
⊢  f(i)-1 ∈ ℕ  by Rewrite5 by i = j
END
```