```
min_ar_wf  THM

⊢  ∀f:(ℕ→𝔹), n:ℕ, i:ℕ(n+1). MinAr(f;i;n) ∈ ℕ(i+1)  by UnivCD
|
1. f : ℕ→𝔹
2. n : ℕ
3. i : ℕ(n+1)
⊢  MinAr(f;i;n) ∈ ℕ(i+1)  by NSubsetInd 3 THEN RecCaseSplit `min_ar`
|
|\
| 3. f(n-0) = f(n)
| ⊢  0 ∈ ℕ1  by Assert (n-0 = n) THEN HypSubst 4 3 THEN Analyze 3
|
|\
| 3. ¬f(n-0) = f(n)
| ⊢  MinAr(f;-1;n) ∈ ℕ1
|   by Assert (n-0 = n) THEN HypSubst 4 3 THEN Analyze 3
|
|\
| .....truecase .....
| 3. i : ℤ
| 4. 0<i
| 5. i<n+1
| 6. MinAr(f;i-1;n) ∈ ℕ(i-1+1)
| 7. f(n-i) = f(n)
| ⊢  i ∈ ℕ(i+1)  by Auto
|
.\
. .....falsecase .....
. 3. i : ℤ
. 4. 0<i
. 5. i<n+1
. 6. MinAr(f;i-1;n) ∈ ℕ(i-1+1)
. 7. ¬f(n-i) = f(n)
. ⊢  MinAr(f;i-1;n) ∈ ℕ(i+1)  by Analyze 6
. |
. 6. MinAr(f;i-1;n) ∈ ℤ
. 7. 0 ≤ MinAr(f;i-1;n) < i-1+1
. 8. ¬f(n-i) = f(n)
. ⊢   by Auto
END
```