```
exponentiation_wf  THM

⊢  ∀n:ℤ, k:ℕ. (n^k) ∈ ℤ  by Analyze
|
1. n : ℤ
⊢  ∀k:ℕ. (n^k) ∈ ℤ  by NatInd Concl
|
|\
| .....basecase .....
| ⊢  (n^0) ∈ ℤ  by Compute ⌈n^0⌉ *⇒ 1
|
.\
. .....upcase .....
. 2. k : ℤ
. 3. 0<k
. 4. (n^(k-1)) ∈ ℤ
. ⊢  (n^k) ∈ ℤ
. | by Compute ⌈n^k⌉ *⇒ if k=₂0→ 1 else n•(n^k) fi
. |    THEN
. |    SplitOnConclITE
. |
. .....falsecase .....
. 5. ¬k = 0
. ⊢  n•(n^(k-1)) ∈ ℤ  by Analyze
. |
. |\
. | ⊢  n ∈ ℤ  by Trivial
. |
. .\
. . ⊢  (n^(k-1)) ∈ ℤ  by Hypothesis
END
```