**Draft PDS-01 Addendum 94**

**Ground Source Heat Pumps (GSHP) Shared Pump Power**

***Modify MINHERS Chapter 3 section 303.1 as follows:***

**Exception 4:** RESNET Home Energy Ratings shall be calculated using the modifications of Standard ANSI/RESNET/ICC 301 established by HERS® addenda:

* Addendum 66, CO2e Index
* Addendum 79, Table 5.1.2(1) Informative Note Correction
* Addendum 77, Integrated Heat Pump Water Heater (iHPWH)
* Addendum 85, Temporarily Converted Garage
* Addendum 94, Ground Source Heat Pumps (GSHP) Shared Pump Power

**Ground Source Heat Pumps (GSHP) Shared Pump Power:**

Modify ANSI/RESNET/ICC 301 Section 4.4.5.1 as follows:

* + - 1. Ground Source Heat Pumps on a shared Hydronic Circulation Loop

For multiple ground-loop and ground-water water-to-air Heat Pumps that are shipped with an integral Blower Fan, and which share common circulation pump(s), the Auxiliary Electric Consumption for the Rated Home shall be determined as follows:

 **(Equation 4.4-4)**

$$Eae=(\frac{SP\_{kW}}{N\_{dweq}}×8760+HPfan\_{kW})×(HLH+CLH)$$

where:

SPkW = Shared Pump power in kW[[1]](#footnote-2). Convert HP to kW with the formula:

kW = HP x 0.746 / motor efficiency. If pump motor efficiency is unknown, use 0.85.

Ndweq = Number of Dwelling Units served by the shared system.

HLH = Annual Heating Load Hours.

CLH = Annual Cooling Load Hours.

HPfankW = Heat Pump distribution fan power in kW.

1. [↑](#footnote-ref-2)