RESNET® HERS® Addendum 94

Ground Source Heat Pumps (GSHP) Shared Pump Power

Date Approved:	October 17, 2025
Voluntary Compliance Date:	TBD
Mandatory Compliance Date:	TBD
Transition Period:	TBD
Proponent:	SDC 300
Organization:	RESNET

Purpose:

Addendum 94 provides criteria for allotting pump power to dwelling units on a shared common water source loop in the calculation of RESNET HERS Index ratings. This issue is not currently addressed by ANSI/RESNET/ICC 301-2022.

Amendment:

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 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:

4.4.5.1 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:

$$\underline{Eae = \left(\frac{SP_{kW}}{N_{dweq}} \times 8760 + HPfan_{kW}\right) \times (HLH + CLH)} \qquad \textbf{(Equation 4.4-4)}$$

where:

SP_{kW} = Shared Pump power in kW[1]. Convert HP to kW with the formula:

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

N_{dweq} = Number of Dwelling Units served by the shared system.

HLH = Annual Heating Load Hours.

CLH = Annual Cooling Load Hours.

$HPfan_{kW}$ = Heat Pump distribution fan power in kW.