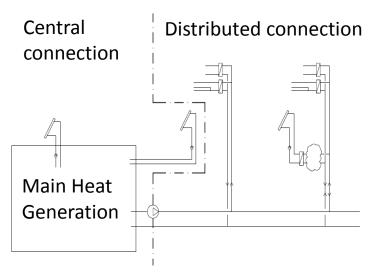
DISTRIBUTED HEAT GENERATION IN A DISTRICT HEATING SYSTEM

(SOLAR THERMAL AND OTHERS)

A Swedish District heating project to show how decentralized heat can be fed into a DH network with use of the R/S alternative

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Sponsored by the Swedish District Association



Distributed heat resources

- Heat recovery (From industry and others)
- Heat pumps and cooling machines
- Solar thermal
- Boilers
- Geothermal heat

Two different kinds of feed in system (in R/S mode)

Flow controlled

- No flow through the shunt pipe SV4 shut or the shunt do not exist
- The flow is completely controlled by the feed in pump, P2, by it self or together with the serial connected 2way valve, SV2 (or fixed speed on P2 and SV2 make the flow change)

Temperature controlled

- Always a flow through the shunt pipe SV4 may never close completely
- The feed-in pump, P2, shall only have enough pressure head to exceed the differential pressure, set point curve for speed is given by a value on Δp1
- Feed in flow is completely controlled by the valve in the shunt, SV4. SV2 may in some circumstances need to help.

