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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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 2-way 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.