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Optimal operation of heat supply systems with piping network

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Highlights

- > A method is proposed to operate heat supply systems with piping network optimally.
- > A discretization approach is proposed to avoid treating the nonlinearity directly.
- > A two-stage approach is proposed to derive a suboptimal solution efficiently.
- > It is shown the method is effective in solution optimality and computation time.
- > It is shown how the piping network can reduce the primary energy consumption.

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