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Policy and communications

EU Commission
DG Energy

Comments on Commission Delegated Regulation amending Annex VII of Directive (EU) 2018/2001 as regards a methodology for calculating the amount of renewable energy used for cooling and district cooling

About Swedenergy

Swedenergy is a non-profit business association for companies that supply, distribute, sell, and store energy - mainly electricity, heating, and cooling. The association has a total of 400 members, which includes state-owned, municipal, and private companies as well as associations within the energy sector. Swedenergy represents more than 35 energy companies that provides district cooling in more than 40 cities throughout Sweden with more than 1 TWh of district cooling deliveries annually.

Introduction

Swedenergy would like to underline the need of technology neutral methods for calculating the amount of renewable energy used for cooling and district cooling and to achieve an equal level playing field for different actors and cooling technologies in the cooling market. The proposed methodologies do not provide this equal level playing field.

Swedenergy has following detailed comments on the proposal to the Annex to Commission Delegated Regulation:

P. 2. 2b) Renewable energy quantity for cooling

It is unclear how to interpret 2.2.b according to Renewable Energy Directive (RED) that Member States shall not count *"cooling of waste heat resulting from energy generation, industrial processes and the tertiary sector (waste heat)2*. We would like a clarification of this point.

P. 3.2 Calculation of the share of Seasonal Performance Factor that qualifies as renewable energy – S_{SPFp}

Thermal driven cooling systems must be considered

According to Renewable Energy Directive (RED) waste energy should be recovered. There is no logic then to disqualify heat driven cooling with absorption and sorption technologies. Heat driven cooling equipment can use low temperature waste heat but then with low performance factors. By setting SPF minimum to 0,1 we have an incentive to use low temperature waste heat instead of not using it at all in summertime.

We suggest that following sentence in the second paragraph should be changed into:
"*The minimum efficiency requirement of the cooling system expressed in primary seasonal performance factor shall be at least at (SPF_{LOW}). For S_{SPFp} to be 100% the minimum*

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efficiency requirement of the cooling system shall be at least at (SPF$_{HIGH}$). SPFlow and SPF high is set in the chart below" (see next page).

SPF values for measured cooling systems should be changed to reflect actual data

Swedenergy suggests that SPF high values for those systems that are measured should be changed to (SPF max = 5), according to the chart below. There is thorough data available that shows that measured performance of cooling generators is about half of the theoretical values suggested to be used for equipment below 1500 kW. The change of SPF max to 5 for measured equipment equals to the number of renewable energy compared to non-measured equipment.

System	*SPF Low*	*SPF High*
Unmetered	*1.4*	*7*
Metered Electric driven systems and DC	*1,4*	*5*
*Metered Thermal driven systems**	*0,1*	*1,8*

**Has to be driven by at least 50% renewable or waste heat*

P. 3.3 Calculation of renewable energy quantity for cooling using standard and measured SPFp

Measurements should be supported which is in line with the rules in the Energy Efficiency Directive (EED). Since measured values usually are not as good as theoretical standard values the regulation should incentivize measurements. We consider the very high thresholds on 1,5 MW will lead to unfair conditions for different cooling solutions in the cooling market and will discriminate district cooling in relation to smaller individual cooling solutions at building level. As an example, if the threshold is set to 1500kW more than 97% of the connected district cooling customers in Stockholm would not have to be measured if they were stand-alone (out of 670 connections). If threshold is set to 50kW about 10% will be unmeasured and at 100kW 25% will be unmeasured. At 50 kW we still exclude the big majority of chillers that are <50kW and not connected to district cooling.

Swedenergy propose that cooling generators bigger than 50kW should be measured to achieve more technology neutral conditions and consequently that second paragraph in p. 3.3 should be changed:

*"For cooling generators with a cooling capacity below ~~1.5 MW~~ **50 kW**, standard SPF can be used, while measured SPF shall be used for district cooling, for cooling generators with cooling capacities higher than or equal to ~~1.5 MW~~ **50 kW** and cooling generators for which standard values are not available."*

Consequently 1,5 MW threshold for calculations using measured values should also be changed to 50 kW in p. 3.4.1.

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