

**Network Innovation Competition 2020 Supplementary Answer form**

<b>Project Name</b>	<b>Retrofit Insulated Cross Arms (RICA)</b>		
<b>Question number</b>	<b>#8</b>	<b>Pro forma section</b>	<b>2</b>
<b>Question date</b>	<b>08/09/2020</b>	<b>Answer date</b>	<b>10/09/2020</b>
<b>Question summary</b>	<b>Please elaborate on the possible implications of RICA for your VIP projects. Is RICA seen as an option for your five VIP major projects, and/or LEI projects and/or other projects?</b>		

**Answer (please retain document formatting and do not exceed 2 pages unless otherwise agreed with Ofgem)**

We see a secondary use of RICAs as being applicable to Visual Impact Provision (VIP) projects. As there is opportunity to take existing routes and make them more compact (i.e. reducing height and not increasing width of the routes). For any VIP project, there is an options assessment methodology used, which takes in account the input from key stakeholders in the local area. The technology of choice for a given investment, will depend on their input on the specific proposal and technology choices.

RICAs could allow for tower heights to be reduced by up to 25%, which may mean that towers could be hidden in certain vistas. In scenarios where towers are already partially hidden by hills or trees, a 25% reduction could reduce or remove them from line-of-sight from key positions.

As the towers can be reduced in height without increasing width, this also presents a more acceptable option to stakeholders who own land along the transmission routes or near them; as this doesn't prevent them working near the towers or impose further limitations on the use of their land, which are some of the limitations of Low-height towers (see Figure 1). Low-height towers require a temporary OHL to be built as part of the construction; which also needs consents. RICAs can be installed without a temporary bypass.

We believe that RICA will provide a solution to enable investments to proceed, where existing technical options do not satisfy all relevant stakeholders. As RICA require development, this options will not be suitable for consideration until towards the end of T2, which means we have not considered RICA as part of our detailed assessment for T2 investments. We believe that this project will enable RICAs to be considered for VIP investments future regulatory periods (e.g. T3).

To enable broader use of RICAs (apart from the primary use case of uprating), we have identified several schemes where we may be able to deploy RICAs for VIP applications in the future. We will be reviewing these sites and potential VIP applications as part of the NIC project. These investments will be reviewed as more detail is understood about RICAs and we can propose more certain plans to stakeholders.

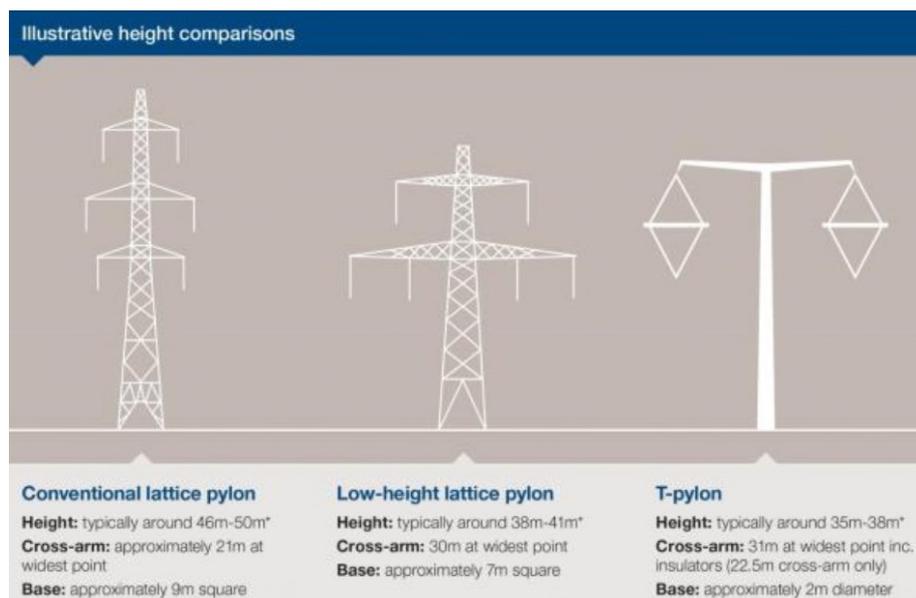


Figure 1- Comparison of several OHL tower options for VIP projects