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Designing the spreaders and splitters for the FFA@CEBAF energy upgrade

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The FFA@CEBAF energy upgrade study aims to approximately double the final energy of the electron beam at the Continuous Electron Beam Accelerator Facility (CEBAF). It will do this by replacing the highest-energy recirculating arcs with fixed-field alternating gradient (FFA) arcs, allowing for several more passes to circulate through the machine. This upgrade necessitates the re-design of the vertical spreader sections, which separate each pass into different recirculation arcs. Additionally, the FFA arcs will need horizontal splitter lines to correct for time of flight and R56. This work will present the current state of the spreader re-design and splitter design.

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I have read and accept the Privacy Policy Statement

Yes

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