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RPI LINAC refurbishment control system engineering plan

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The RPI LINAC refurbishment control system engineering plan outlines Cosylab's and RPI's approach to initiating and managing the control system architecture for an accelerator refurbishment project at RPI. One of the goals was to achieve a low total cost of ownership, which encompasses the direct price, the cost of maintenance, the upgrade potential, and the quality and cost of support services. To create the technical part RPI provided valuable knowledge and experience from running the RPI LINAC and Cosylab used prior experience and industry best practices to deliver high-level project documentation, which includes the control system architecture, strategies for device integration, and clearly defined scope descriptions. The documentation also covers specific content, such as detailed subsystem descriptions, device interface descriptions, subsystem operation descriptions and recommended implementation methods for specific device types. Several technical solutions, lead time comparisons, and the quality of support services were thoroughly evaluated. In terms of project management, a concrete upgrade plan was developed. A standard project management process was proposed. The work was divided into independent work packages, and included a recommended sequence within the project. The outcome of the study is a comprehensive document, which provides all the necessary information required to initiate the control software portion of the project.

Footnotes

Funding Agency

Paper preparation format

Word

Region represented

Europe

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