

## MEMORANDUM

Date: March 5, 2019  
To: Distribution  
From: Rolf Ent and Arne Freyberger for the Nuclear Physics Experiment  
Scheduling Committee  
Subject: Change of the Accelerator Energy Gain per Pass

Within the past week, C100 cryomodules 1L25 and 1L26 in the North Linac had a combined loss of 32 MeV of energy gain per pass. This loss is due to contamination of the SRF cavity surface and cannot be recovered without removal of the entire cryomodule from CEBAF. The North linac had no headroom going into this event; there is no choice but to lower the accelerating gradient of both linacs. The research program, with modification as describe in the next paragraph, will continue once CEBAF has been configured at the lower energy.

The energy gains of 1000 MeV and 1020 MeV in the North and South Linac respectively have been chosen as the values that provide the highest energy possible with good likelihood of completing the research laid out for this run cycle. The chosen gradients affect negatively some of the experiments in Halls B and C but will allow completing other parts of them.

Using the lessons learned during this run cycle, our effort has now shifted to understand our options, schedule the necessary module repairs and maintenance to achieve the Fall run cycle energy requirements.