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Subject: Maximum Operating Voltage
for XL Series Klystron.

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The maximum operating voltage for the XL series of X-Band klystrons is 450kV. Under no circumstances should they be operated higher than that. This means for example, that a klystron operated at 440kV must have an overshoot in voltage no greater than 10kV or 2% and one operated at 445kV can have an overshoot no larger than 5kV or 1%. The XL4 klystron which will be used initially in the injector will operate nominally at 55MW which corresponds to 415kV. While processing the RF system, it is desirable to operate at maximum klystron power. It is understood that overshoot of the modulator power supply may impose a nominal operating voltage which will not allow the full power capability of the klystron to be utilized.