

Beam Induced Radiation Problems and Cures,
P.E. GEAR, Rutherford Appleton Laboratory - ISIS,
the high intensity pulsed neutron source at the
Rutherford Appleton Laboratory, operates with a mean
proton beam power in excess of 160 kW at a beam
energy of 800 MeV. Beam loss is controlled to prevent
damage to machine components and localised high
levels of induced radioactivity. A description is given
of how ISIS is operated so as to minimise the induced
activity. Details are provided of the procedures and
formalised methods of control that enable the manual
handling of activated machine components within
limited, collective, personnel dose rates.