MU Calculations: Electrons

$$MU = \frac{D}{PDD_{Electrons} \times IF}$$

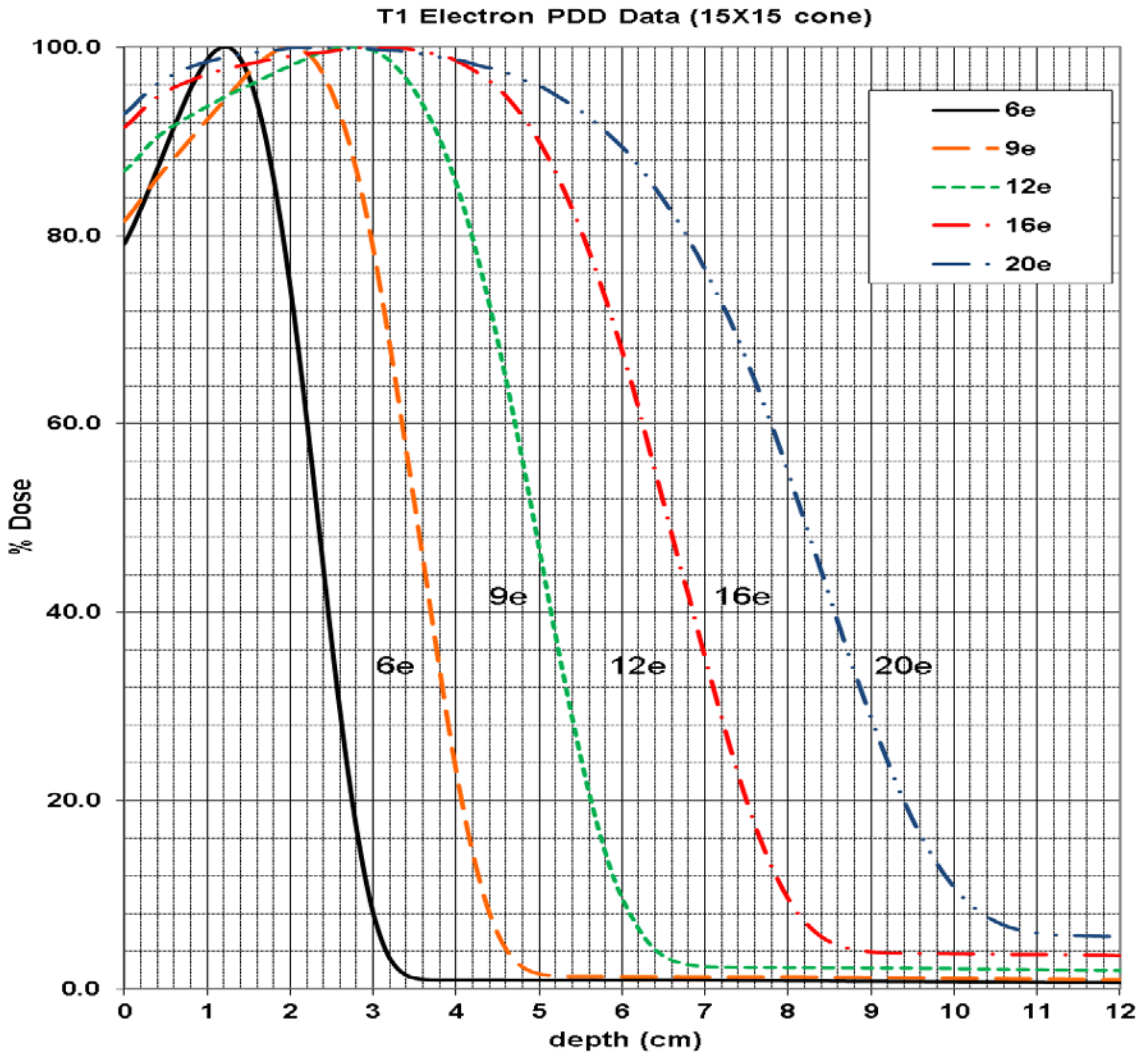
- For electron MU calculations, what does the Insert Factor Depend (IF) on?
- How are these dependencies measured?
- How do PDD curves for electron beams change with:
  - Field Size
  - Energy
  - Extended SSD

MU Calculations: Electrons

$$MU = \frac{D}{PDD_{Electrons} \times IF(E, CS, CF, G)}$$

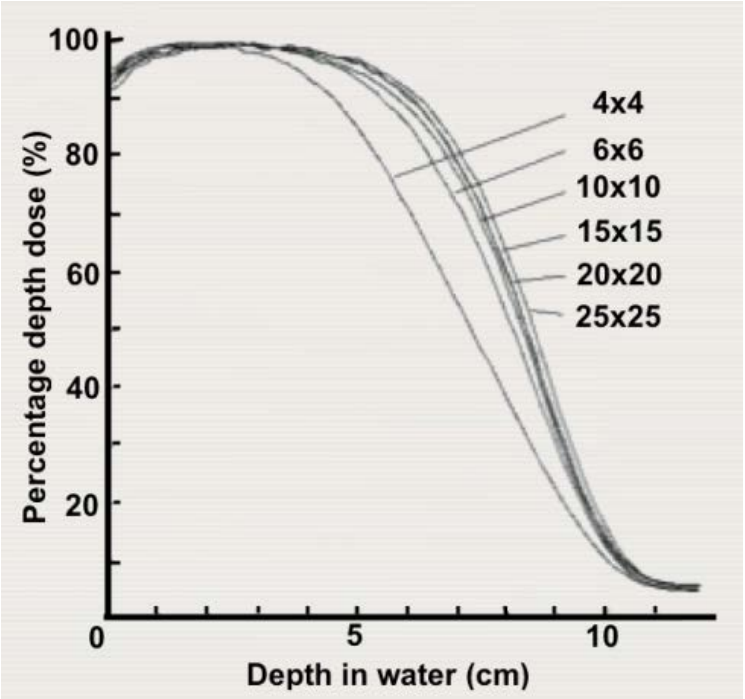
- Insert Factor Dependencies
  - Energy (E)
  - Cone Size (CS)
  - Cutout factor (CF)
  - Gap Factor (G)

MU Calculations: Electrons



MU Calculations: Electrons

- The PDD curves for electron beams have minimal dependence on field size, except for small fields where the side of the field is smaller than the practical range of the electron beam.
- When lateral scatter equilibrium is not reached at small electron fields:
  - Depth of maximum dose moves closer to the surface



Electron beam overview

- http://www-naweb.iaea.org/nahu/DMRP/documents/slides/Chapter_08_Electron_beams.pdf