

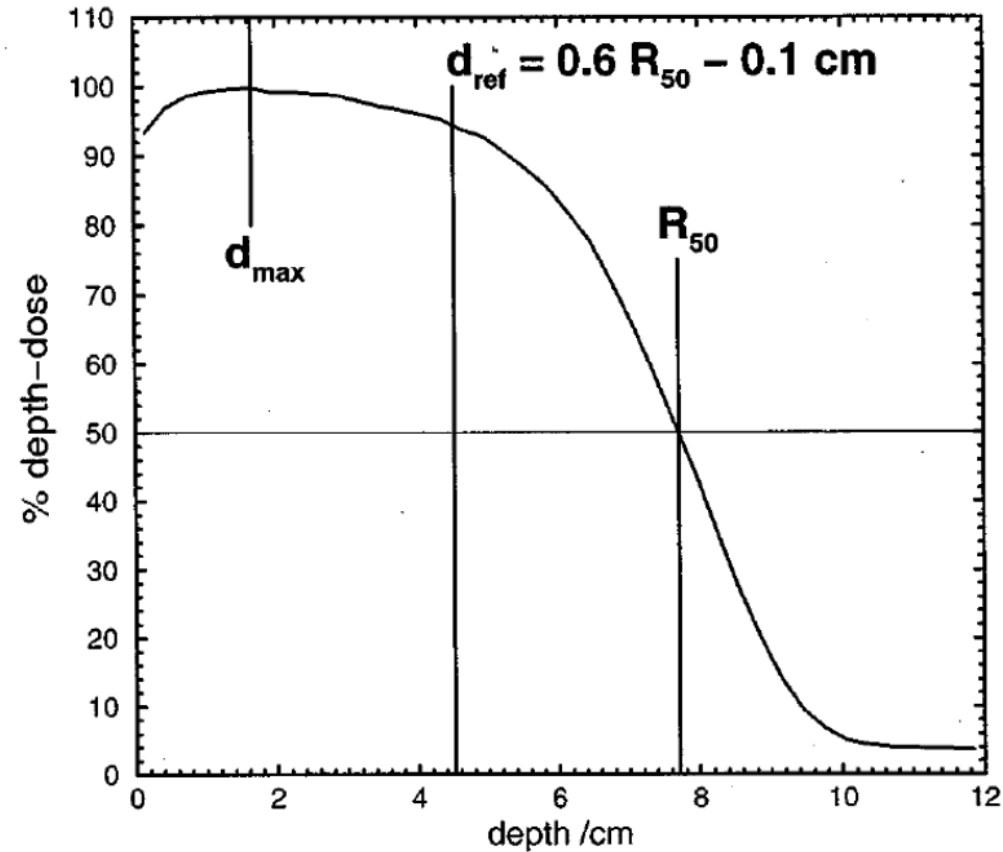
TG-51

- How do you get $\%dd(10)_x$ for photons $> 10\text{MV}$
 - What about for photons $< 10\text{MV}$
- Why did TG051 complicate things by allowing you to use either 50cm or 30cm distance for the lead foild?
- Do you really have to use the lead foil for higher energy photon beams?
- Is there any difference between $\%dd(10)$ and PDD(10)? Why does TG-51 use the former notation?
- How large is the dose contribution from electron contamination anyway? Why do we care?

TG-51

- Does the polarity correction factor, P_{pol} , depend on the electrometer?
- How many data points do you usually take when you measure the polarity factor?
- What factors affect the measurement of P_{ion} ?
- What does r_{cav} mean? Is it the radius of the air cavity of the ion chamber or air cavity + chamber wall?
- What steps do you do to make sure that your TG-51 calibration is correct?

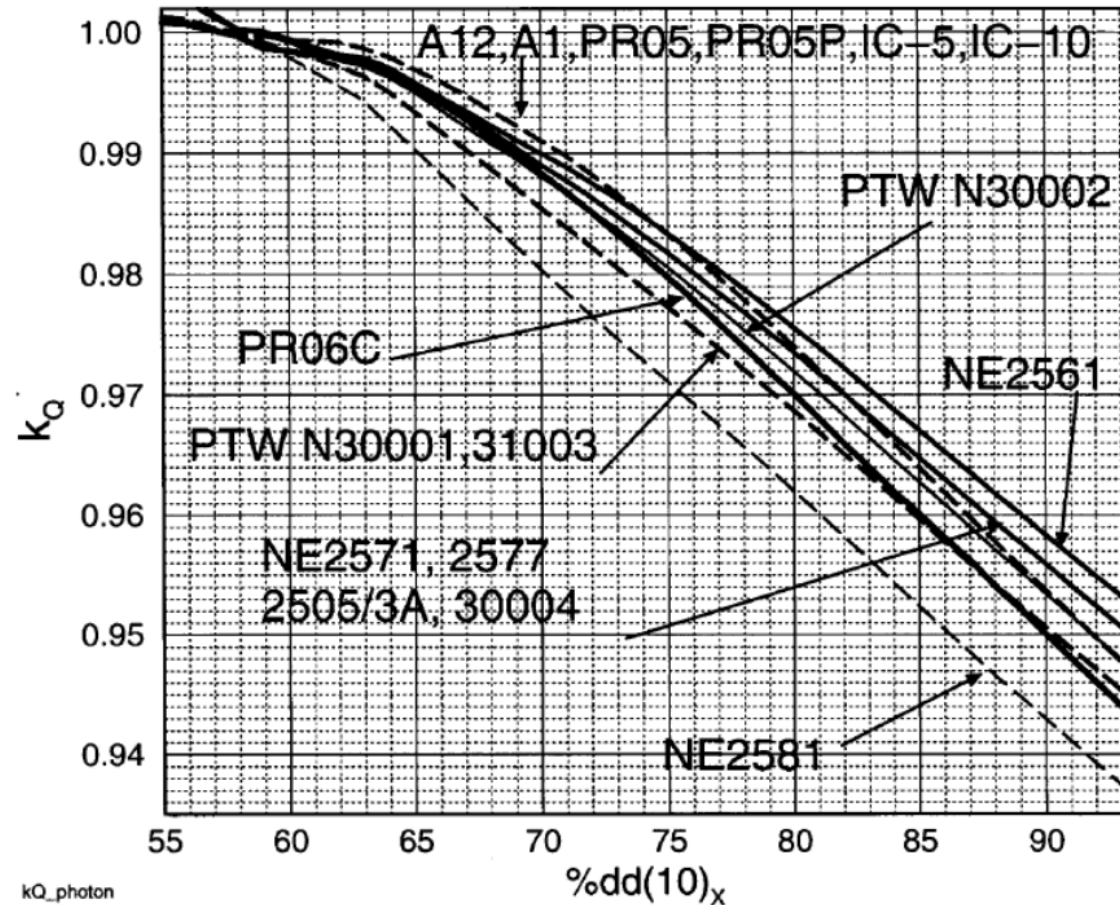
How do you calibrate electron beam output of your linac? Discuss the whole calibration process and the picture below.



Follow Up

- What equipment do you need to do the calibration?
- What corrections do you apply to your raw measurements?
- Why do we distinguish depth-ionization curve from depth-dose curve for electrons but not photons?

How do you calibrate photon beam output of your linac? Discuss the whole calibration process. What is k_Q ?



Follow Up

- What equipment do you need to do the calibration?
- What corrections do you apply to your raw measurements?
- Can you use solid water for your beam calibration?
- Can you use diodes for beam calibration? Why?

What is this instrument, and can it be used to calibrate your photon beams? Electron beams?



Follow Up

- Should you use the parallel plate ADCL calibration for TG-51 electron dosimetry or cross-calibrate with a farmer chamber?
- What are the steps to cross-calibrate a parallel plate chamber with a farmer chamber?
- Can you use a cylindrical chamber for absolute dosimetry of low energy electron beams?

Describe some of the dose output checks performed on the linacs at your facility.



Follow Up

- What actions would be taken at your institution if your daily constancy check was off by 4% from your benchmark value?
- What if the daily output reading was 7% off but the physician was insistent upon treating prior to checking the output with an ion chamber and recalibrating if necessary?