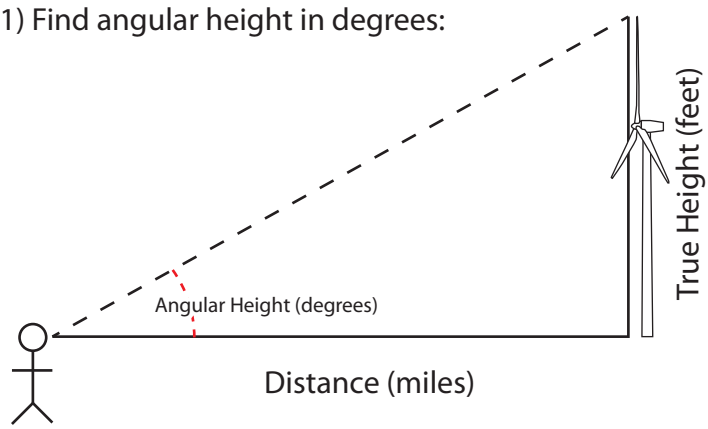
WHISTLING RIDGE ENERGY LLC
TOM WATSON
APPARENT TURBINE HEIGHT
EXHIBIT NO. 8.07r

How to Calculate the Apparent Height of a Distant Object

When you know distance and true height of object

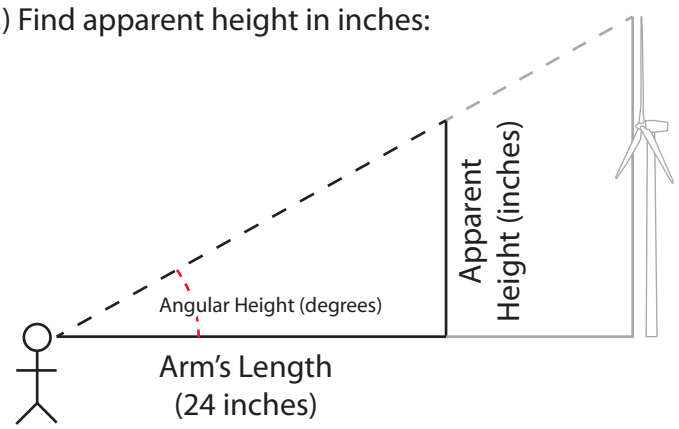
1) Find angular height in degrees:



$$\tan(\text{Angular Height}) = \frac{\text{True Height}}{\text{Distance}*5280}$$

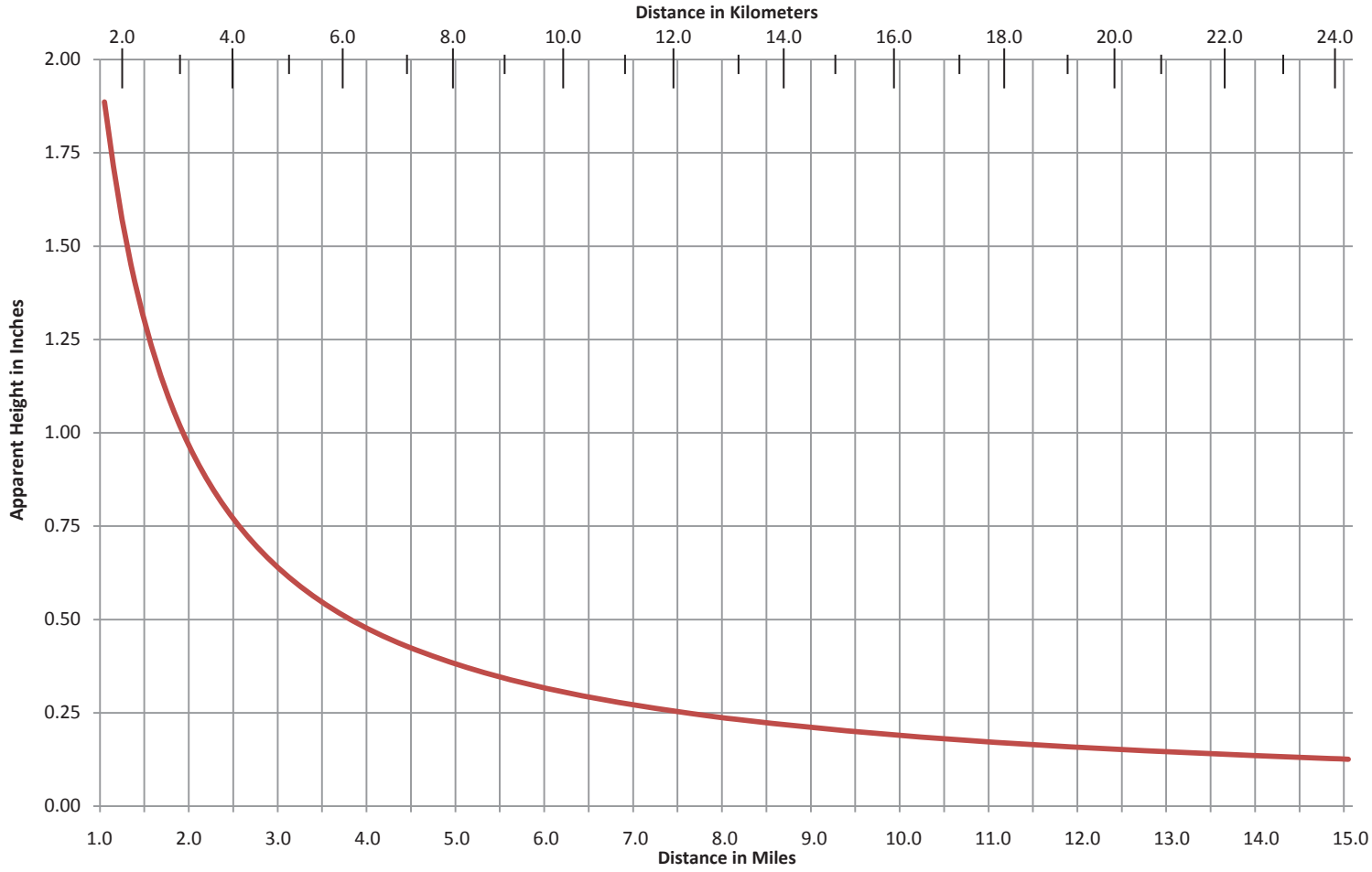
$$\text{Angular Height} = \tan^{-1}\left(\frac{\text{True Height}}{\text{Distance}*5280}\right)$$

2) Find apparent height in inches:



$$\tan(\text{Angular Height}) = \frac{\text{Apparent Height}}{\text{Arm's Length}}$$

$$\text{Apparent Height} = \tan(\text{Angular Height}) * 24 \text{ inches}$$

Apparent Height of 415' Wind Turbine

Measured at Arm's Length