Pole Condition Assessment

Rating system for pole condition:

Several factors impact the condition of a pole and the assessment of its capabilities and useful life expectancy:

Some of these factors are:

- Age of the pole
- Surface deterioration or shell rot
- Longitudinal cracks along the pole
    - Characterized by depth of the crack [accessible from the ground]
    - Characterised by the length of the crack
    - Characterized by the number of cracks in the pole
    - Characterized by the presence of rot in the crack
- Ground line deterioration of the pole to 6 inches below grade
    - Check with a sharp object or screwdriver to what distance the wood is soft from deterioration. Check in 4 quadrants and get an average depth of penetration.
- Test with a hammer to see if the heart of the pole sounds solid or not.

These factors combine to give an overall rating of the pole.

Hearst Power has decided to use the following factors and rating for each factor:

Age (A):

Rating Value	Criteria or measurements
1	over 50 years old
2	40 to 50 years old
3	30 to 40 years old
4	20 to 30 years old
5	less than 20 years old

(B) Sum of depth of all separate cracks accessible by a person at ground level

Rating Value	Criteria or measurements
1	Greater than 12 inches
2	10 to 12 inches
3	8 to 10 inches
4	4 to 8 inches
5	Less than 4 inches

(C) Length of cracks one inch or more deep- reachable by a person on the ground.

Rating Value	Criteria or measurements
1	More than 50% of the pole height
2	25% to 50% of the pole height
3	10% to 25% of the pole height
4	Less than 10% of the pole height

(D) Number of cracks on the pole that are significant [appear to be deep- 1 inch or more- and wide – ¼ inch or more and visible from the ground if above the secondary level.]

Rating Value	Criteria or measurements
1	More than 10
2	8 to 10
3	6 to 8
4	3 to 6
5	Less than 3

(E) Presence of rot or growth in cracks or spur gaffs

Rating Value	Criteria or measurements
1	Rot / growth is present
2	No rot / growth present

(F) Condition at ground line [at grade]. Take 4 measurements 90 degrees apart. Sum the values of the penetration.

Rating Value	Criteria or measurements
1	More than 12 inches
2	10 to 12 inches
3	8 to 10 inches
4	4 to 8 inches
5	Less than 4 inches

(G) Hammer test no more than 1 foot above ground level and take soundings 90 degrees apart

Rating Value	Criteria or measurements
1	Definite Core deterioration
2	Possible Core deterioration
3	No perceived core deterioration

In each measure a low number is a poorer condition pole.

To come up with a single value each of the factors A to G are weighted equally relative to the other factors. Hence to get an overall assessment of the pole condition, add the rating values of the factors together for each pole. For example the worst score would be A+B+C+D+E+F+G=7 and the best score would be 29.