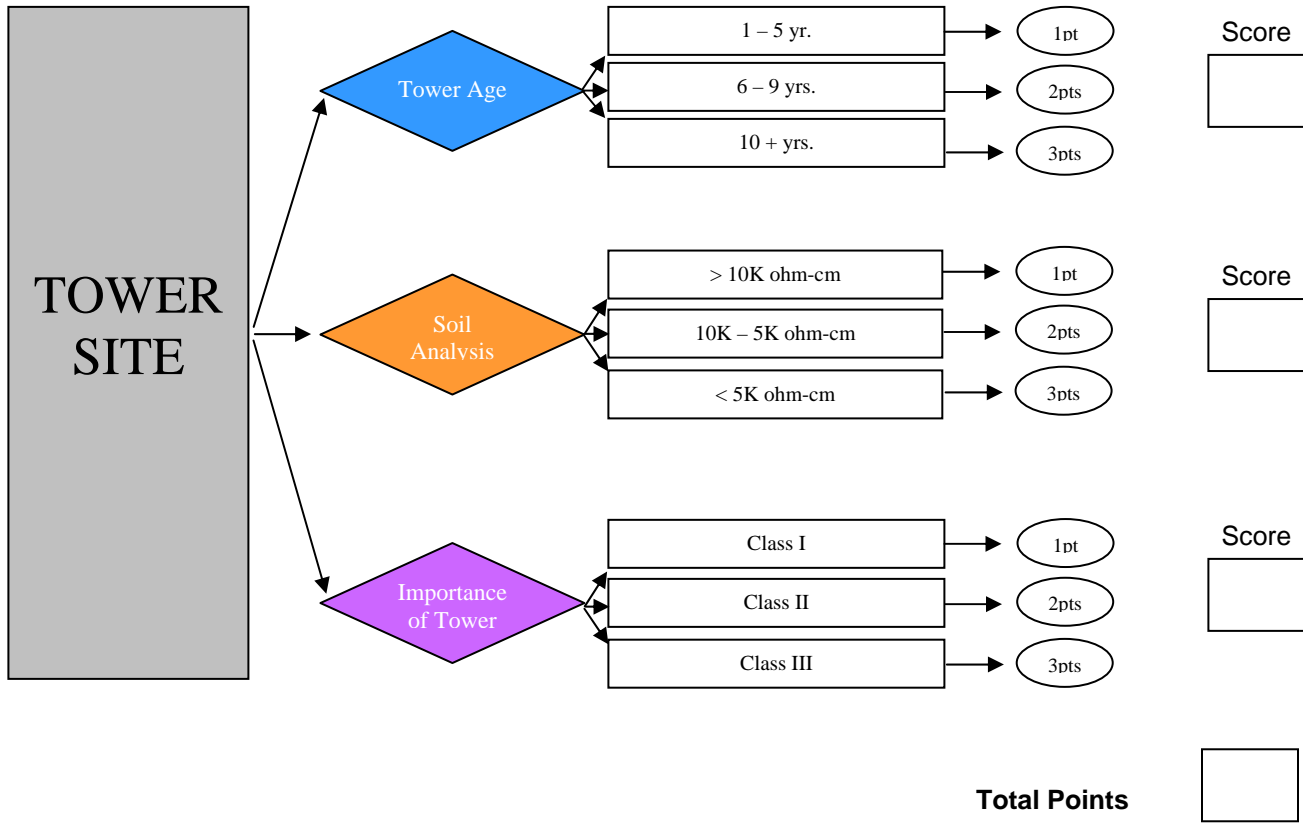


# Guyed Tower Anchor Corrosion Control Flow Chart for EXISTING TOWERS



**Add points from each category to determine range**

**OPTION 1**

*Points Range: ≤ 6*

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**Action:** Reanalyze  
in 3 - 5 yrs.

**OPTION 2**

*Points Range: 7 to 9*

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**Action:** Install  
AnchorGuard  
View ANSI/TIA222-G

See reverse side for additional information on this flow chart.

## Reading the Flow Chart

This flow chart is designed to provide a simple and easy method to determine what course of action one must take to protect their towers. View ANSI/TIA 222-G for further information on approved methods of cathodic protection.

**Note:** For a complete method of procedure on assessing the condition of tower anchors and the various methods of corrosion protection, refer to the Anchor Inspection Standard 4/06. It is advisable to install cathodic protection on all guyed towers, especially new structures.

### Tower Age

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Corrosion is directly related to time or *age* of a structure. As time passes and a tower structure ages, the likelihood of corrosion deteriorating the guy anchor rises dramatically. Once the galvanizing is gone the steel is exposed, causing accelerated corrosion. The longer a guy anchor is exposed to corrosive soils, the greater the deterioration of the anchor.

Installing cathodic protection on new structures is always recommended in order to limit future maintenance and risk. A system such as AnchorGuard allows for annual measurements to be taken of the below ground conditions.

Installing cathodic protection on existing structures is recommended because the forces of corrosion are always in effect.

### Soil Analysis

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Collect a forty-eight ounce sample or six cups of soil from the bottom of the excavation and store in a water tight container. *Soil from one anchor is adequate to perform necessary tests.*

- 2.3.1 Laboratory test the sample in both as-found and saturated state to determine resistivity in ohm-centimeters.

Table 4.1.1: Soil Resistivity Classification <sup>A.W.Peabody</sup>	
<u>Resistivity in ohm/cm</u>	<u>Category</u>
0 – 5,000	Very Corrosive
5,000 – 10,000	Moderately Corrosive
10,000 – 25,000	Progressively Less Corrosive

### Importance of Tower

(from ANSI/TIA-222-G Table 2-1)

Description of the Structure	Class
Structures that due to height, use or location represent a low hazard to human life and damage to property in the event of failure and/or used for services that are optional and/or where a delay in returning the services would be acceptable.	I
Structures that due to height, use or location represent a substantial hazard to human life and/or damage to property in the event of failure and/or used for services that may be provided by other means.	II
Structures that due to height, use or location represent a high hazard to human life and/or damage to property in the event of failure and/or used primarily for essential communications.	III