## Bacanskas Rules of EQ Engineering\*

- What does the document say? (or our memory is not as good as we think)
- 2. Words matter! Don't paraphrase requirements, you will usually be wrong.
- 3. 'Let Me Explain' is always the wrong answer
- Qualified life is an estimate, not an absolute! Six decimal places say that you don't understand.
- 5. Know your licensing basis for EQ. Every basis is different.
- 6. If you don't know what's in the field, your file may be wrong;
- 7. Anything can happen in an EQ test
- 8. Best 2 out of 3 specimens does not mean its qualified
- If it's not simulated by the EQ test or required by the EQ analysis, it can't be EQ maintenance
- 10. If it's not EQ, get it out of your EQ maintenance requirements document
- 11. Referenced standards (IEEE 101) are NOT requirements unless specifically endorsed by Reg Guide, Regulation or a license commitment
- 12. A special interest group memo is NOT a design input under Appendix B
- 13. Answer the precise question that was asked!
- 14. Render therefore unto Caesar.
- 15. Don't prove how little you know by trying to show how much you know!
- 16. For any Limitorque EQ question open the NUGEQ guidance document first!
- 17. "The procedure allows it" is the wrong answer.
- 18. EQ is not an occasional activity.
- 19. If the question to be answered is "what time is it," don't explain how to build a watch.
- 20. Follow IRAC.
  - a. Define the ISSUE
  - b. Set out the legal REQUIREMENT
  - c. Perform the ANALYSIS against the requirement.
  - d. Set forth your CONCLUSION.
- 21. If you don't understand how the equipment is used in the plant, you can't qualify it.
- 22. If you don't understand how the equipment works, you can't qualify it
- 23. A chemical name does not specify a compound EPDM1#EPDM2
- 24. Generic activation energy values do not exist.
- The plant profile may not be the one required for qualification of a specific component
- Don't assume that people you work with understand EQ requirements; they usually don't.
- 27. Don't expect a regulator to know more about your program than you do.
- 28. What you see as obvious, others may not have the knowledge to see
- 29. Respect your regulator; they are engineers just like you and have a job to do also.
- 30. Arrhenius is the best we've got. Learn to love it!
- 31. That is not a problem, it's just a DOR item....NOT!
- 32. EQ is not a desk job