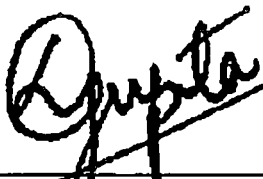


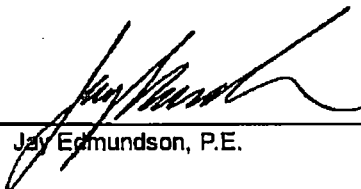
Palo Verde Nuclear Generating Station - APS Main Hoist Reeving Calculations

Morris Material Handling
Calculation # 36676-01
Customer PO # 500556483

Revision # 07

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REVISION PAGE

<u>Revision</u>	<u>Description of Revision</u>	<u>Date of Revision</u>
0	Initial Release	February 8, 2012
1	Adjusted References section Adjusted Methodology section Changed Calc Title Added calc # and revision to all pages	May 4, 2012
2	Added Section 6: Broken Rope Calculations Adjusted References section Updated calculations to reflect design changes Added Attachment 3	January 25, 2013
3	Updated References section Updated calculations to reflect design changes and comments	January 17, 2017
4	Updated References section Updated calculations to reflect design changes and comments	July 28, 2017
5	Updated trunnion pin calculation methodology and material name (5.4) Changed crosshead yield strength and calculation methodology (5.4)	August 25, 2017
6	Added Section 5.3.5	September 1, 2017
7	Added Section 5.3.4.2	September 28, 2017

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1. PURPOSE

Evaluate the main hoist reeving system for the 225 ton Single Failure Proof containment building polar crane and verify that it meets the requirements of the specification as given in Ref. 9.

The Remaining Sections (107 pages)
are considered Proprietary