

## LimerickNPEm Resource

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**From:** Christopher.Wilson2@exeloncorp.com  
**Sent:** Thursday, January 12, 2012 10:54 AM  
**To:** Kuntz, Robert  
**Subject:** RWCU Pump bolting  
**Attachments:** Pages from UFSAR Chapters 1-4.pdf

Rob,  
As a follow-up to Bill Holston from our phone call

Table 3.9-6 (p) of the UFSAR clearly shows the bolting as low strength (less than 150 KSI)

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**From:** Christopher.Wilson2@exeloncorp.com

**Created By:** Christopher.Wilson2@exeloncorp.com

**Recipients:**  
"Kuntz, Robert" <Robert.Kuntz@nrc.gov>  
Tracking Status: None

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**LGS UFSAR**

Table 3.9-6(p)

**RWCU PUMP**

Following is a summary of the design calculations on the RWCU pump (B, C only):

<u>Pump Part<sup>(1)</sup></u>	<u>CALCULATED STRESS (psi)</u>	<u>ALLOWABLE STRESS (psi)</u>
Casing wall	10,820	12,814
Cover bolting	20,000	25,000
Pedestal bolt (shear)	18,015	44,000
<u>Motor Part<sup>(2)</sup></u>		
Motor foot bolts (shear)	174	60,000
Pump pedestal bolt (shear)	194	60,000
Foundation bolting	230	60,000

Following is a summary of the design calculations on the "A" RWCU pumps:

<u>Part(1)</u>	<u>Calc. Stress (psi)</u>	<u>Allowable Stress (psi)</u>
Pump Suction Nozzle	12,774 (U1) 1,582 (U2)	15,000
Pump Discharge Nozzle	12,824 (U1) 1,546 (U2)	17,500
Motor Case Outlet Nozzle	5,995 (U1) 5,995 (U2)	17,500
Motor Case Inlet Nozzle	5,997 (U1) 5,997 (U2)	17,500
Pump Support Flange Bolts (shear)	3,437 (U1) 3,325 (U2)	25,833 (U1) 11,800 (U2)
Pump Case/Motor Case Studs	23,229 (U1) 23,229 (U2)	25,000

<sup>(1)</sup> ASME Code calculations.

<sup>(2)</sup> Non-ASME Code calculations.