

**Sengupta, Abhijit**

**From:** Thomas, George *NKR*  
**Sent:** Saturday, January 23, 2010 4:02 PM  
**To:** Farzam, Farhad  
**Cc:** Lake, Louis; Khanna, Meena  
**Subject:** FW: Design Basis Calculations  
**Attachments:** 0102-0135-02 concrete strength and elastic modulus r0 final.pdf; 0102-0135-03\_r0\_final.pdf; 0102-0135-04 FE Model Description signed.pdf; 0102-0135-05 Conduit Local Stress Analysis signed (2).pdf; 0102-0135-07 concrete moment capacity load r0 (2).pdf; 0102-0135-08 seismic wind tornado r0.pdf

Farhad,  
Attached are 6 additional calcs that PE has provided for NRC review.  
Thanks.  
George

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**From:** Dyksterhouse, Don [mailto:don.dyksterhouse@pgnmail.com]  
**Sent:** Saturday, January 23, 2010 3:34 PM  
**To:** Thomas, George  
**Cc:** Dyksterhouse, Don; Miller, Garry  
**Subject:** Design Basis Calculations

George,  
Please find attached the following calculations: For your information, the attached MPR signed calculations have the number listed in the left column. The calculation numbers in the red are the Progress Energy Calculation numbers. I expect the Tendon Detensioning Calculation to be approved early next week and will transmit the calculation to you after approval.

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|-----------------|--|
| 0101-0135-jlh-2 | <u>S09-0054</u> Radial Pressure at Hoop Tendons ( <b>provided on 1/8/10</b> )                                |
| 0101-0135-01    | <u>S09-0055</u> Reinforcement Ratio and Effective Modulus of Elasticity ( <b>provided 1/8/10</b> )           |
| 0101-0135-02    | <u>S09-0056</u> Concrete Modulus of Elasticity and Minimum Compressive Strength                              |
| 0101-0135-03    | <u>S10-0001</u> Tendon Tension Calculation   |
| 0101-0135-04    | <u>S10-0002</u> Finite Element Model Description   |
| 0101-0135-05    | <u>S10-0003</u> Conduit Local Stress Analysis  |
| 0101-0135-06    | <u>S10-0004</u> Tendon Detensioning Calculation ( <b>not approved at this time</b> )                         |
| 0101-0135-07    | <u>S10-0005</u> Bending/Tension Interaction Diagrams for Selected Sections                                   |
| 0102-0135-08    | <u>S10-0006</u> Seismic Wind, and Tornado Evaluation and Delamination Depth Evaluation for Detensioned State |

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**From:** Thomas, George [mailto:George.Thomas2@nrc.gov]  
**Sent:** Friday, January 22, 2010 1:27 PM  
**To:** Dyksterhouse, Don  
**Subject:** Design Basis Calculations

Hello Don,

Do you have any more Design Basis calculations ready for NRC review. If you do, please email them to me, or let me know when they would be available.  
Thanks.

*m-y*

George Thomas  
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