

STATE BUILDING COMMISSION

June 3, 2008
10:00 a.m.
New Education Building, Suite 450
Raleigh, NC

MINUTES

MEMBERS PRESENT

Vice Chairman John Kirkland, Kevin MacNaughton, Terry Turner, Sam Vaughan, and John Muter

OTHERS PRESENT

Dolan Simmons, Erin Lawrence, Bruce Garner, Chris Ivers (Department of Environment & Natural Resources); Susan Gentry (Department of Insurance); Grover Burthey (HUB Office); Jack Colby (NCSU); Peter Veit, Neal Enevoldsen (Department of Health & Human Services); Steve Miller (DCR); LeAnn Martin (Attorney General's Office); Greg Driver, Tommy Harrill, Ryan Scruggs, Veronica Howell (State Construction Office).

1. CALL TO ORDER AND ETHICS STATEMENT

Vice Chairman John Kirkland called the meeting to order at 10:00 a.m. and read the Ethics Statement. John Muter recused himself from Agenda Item 8.

2. APPROVAL OF MINUTES

Sam Vaughan made a motion to approve the minutes of the April 22, 2008, meeting. The motion was seconded by John Muter. The minutes were approved as written.

John Muter made a motion to vote on Agenda Items 3-7 as a group. The motion was seconded by Sam Vaughan. Ryan Scruggs presented Item Nos. 3-7.

3. SELECTION OF DESIGN FIRM

Department of Health & Human Services - Multiple Annual Service Agreements

a. Architectural Services

The project was advertised in the Purchase Directory April 16-28, 2008. Fifteen firms responded; none were interviewed. The Pre-selection Committee recommended the following firms in priority order.

- #1 JAE Architecture, Inc. - Wake Forest, NC
- #2 Mullins & Sherman Architects - Sanford, NC
- #3 2H Design Services - Charlotte, NC

b. Mechanical/Electrical Engineering

The project was advertised in the Purchase Directory April 16-28, 2008. Eleven firms responded; none were interviewed. The Pre-selection Committee recommended the following firms in priority order.

- #1 Engineered Designs, Inc. - Raleigh, NC
- #2 McKnight-Smith-Ward-Griffin Engineers, Inc. - Charlotte, NC
- #3 Sigma Engineered Solutions, PC - Morrisville, NC

c. Hazardous Materials

The project was advertised in the Purchase Directory April 16-28, 2008. Seven firms responded; none were interviewed. The Pre-selection Committee recommended the following firms in priority order.

- #1 Mactec Engineering & Consulting, Inc. - Raleigh, NC
- #2 Matrix Health & Safety Consultants, LLC - Raleigh, NC

Kevin MacNaughton asked DENR if the annual service agreements were still useful with the increased limits. DENR responded that they were utilizing 2007 money, which falls under the old limits. Mr. MacNaughton asked if they would continue with annual service agreements after the 2007 funds were exhausted. DENR responded they would not.

4. SELECTION OF DESIGN FIRM

Department of Cultural Resources
Southeastern Center for Contemporary Art (SECCA) - Hanes House Repairs

The project was advertised in the Purchase Directory March 17 - April 1, 2008. Eight firms responded; five were interviewed. The Pre-selection Committee recommended the following firms in priority order.

- #1 Szostak Design, Inc. - Chapel Hill, NC
- #2 TFF Architects & Planners LLP - Greensboro, NC
- #3 Cannon Architects - Raleigh, NC

5. SELECTION OF DESIGN FIRM

Department of Environment & Natural Resources
Roanoke Island Aquarium - Septic System Upgrades

The project was advertised in the Purchase Directory on February 26, 2008. Five firms responded; three were interviewed. The Pre-selection Committee recommended the following firms in priority order.

- #1 Quible & Associates, PC - Kitty Hawk, NC
- #2 Cavanaugh & Associates, PA - Wilmington, NC
- #3 George Finch/Boney and Associates, PA - Raleigh, NC

6. SELECTION OF DESIGN FIRM

Department of Environment & Natural Resources
Parks and Recreation
Chimney Rock State Park - Scuttle Hole Trail Repairs

The project was advertised in the Purchase Directory on April 14, 2008. Seven firms responded; four were interviewed. The Pre-selection Committee recommended the following firms in priority order.

- #1 George Finch/Boney and Associates, PA - Raleigh, NC
- #2 McGill Associates, PA - Asheville, NC
- #3 HadenStanziale, PA - Charlotte, NC

7. SELECTION OF DESIGN FIRM

Department of Environment & Natural Resources
Parks and Recreation
Chimney Rock State Park - Elevator and Sky Lounge Egress Improvements

The project was advertised in the Purchase Directory on April 9, 2008. Nine firms responded; four were interviewed. The Pre-selection Committee recommended the following firms in priority order.

- #1 Clark Patterson Lee - Charlotte, NC
- #2 Architectural Design Studio, PA - Asheville, NC
- #3 The Wooten Company - Raleigh, NC

Kevin MacNaughton made a motion to approve the Committees' recommendation for Agenda Items 3-7. Terry Turner seconded the motion. The selections were approved as recommended.

8. SELECTION OF CONSTRUCTION MANAGER AT RISK

Department of Environment & Natural Resources
Green Square Complex - Excavation, Shoring, and Underground Parking

Ryan Scruggs presented the project. The project was advertised in the Purchase Directory on April 10, 2008. Six firms responded; four were interviewed. The Pre-selection Committee recommended the following firms in priority order.

- #1 Clancy & Theys Construction Company - Raleigh, NC
- #2 Hunter Roberts Construction Group - Raleigh, NC
- #3 Bovis Lend Lease, Inc. - Raleigh, NC

Terry Turner made a motion to approve the Committee's recommendation. Sam Vaughan seconded the motion. The selection was approved as recommended. (John Muter recused himself from the vote.)

Kevin MacNaughton informed members that he had talked with Dolan Simmons and understood that this contract was for the start-up of the project only due to lack of funding for the entire project. His question was whether they would have the ability to change order the remaining work or would it go back out for selection of another CM. Greg Driver stated that this project would go to the platform and stop. This project would shore, excavate, and construct the underground parking deck. The DENR office building and NRC portions of the project would have to be advertised. The above ground parking deck would be a DOA project.

9. Reports - University of North Carolina General Administration

- a. Designer Selections - All Project Categories
- b. Status of CM at Risk Projects Advertised After January 1, 2002

Gordon Rutherford was not in attendance so Mr. Kirkland asked members to hold any questions regarding the reports until the next meeting.

John Muter provided feedback on the UNC Systems Meeting he attended. There was general discussion on the problems with the General Conditions of the Consensus Documents.

10. INFORMATION

- a. Project Distribution
- b. Emergency Selections
 - Port of Morehead City - Building Repairs to Warehouse No. 6
 - NC Justice Academy, Salemburg - Repairs to Lift Station

Greg Driver presented the Project Distribution and the Emergency Selections. There were no questions.

11. OLD BUSINESS

There was no old business.

12. NEW BUSINESS

Kevin MacNaughton informed members that the University is seeking Legislative funding for the Utility Infrastructure Project. He introduced Jack Colby, Assistant VC for Facilities Operations at NC State University. Mr. Colby briefed the Commission on the project with a PowerPoint presentation (copy attached). Terry Turner made a motion that the Commission send letters of support to the Legislature. The motion was seconded by Sam Vaughan. The motion was unanimously approved by the Commission. It was agreed that Greg Driver would draft a letter for Chairman John Thompson's signature.

11. SCHEDULE NEXT MEETING

The next meeting was scheduled for July 22, 2008, at 10:00 a.m.

12. SUBCOMMITTEES

There were no subcommittee reports.

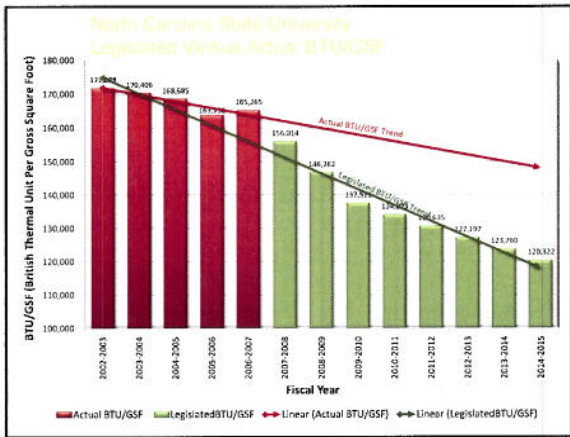
13. ADJOURNMENT

Vice Chairman Kirkland adjourned the meeting at 11:00 a.m.

Attachment (NCSU Utility Infrastructure Project Presentation)

Utility Infrastructure Project Briefing

State Building Commission
 June 3, 2008
 Jack Colby, Asst. VC for Facilities Operations
 NC State University



- ## Goals and Objectives
- To meet **Capacity** needs to support growth
 - To improve **Reliability** and **Quality**
 - To evaluate funding strategies
 - To Leverage Energy Management Options
 - To Support the Institutional Mission

Infrastructure Projects

- Sullivan Substation
- Centennial Substation
- Cates/Yarbrough Steam Plant Renovations
- Co-Generation Option for Steam Plants



Project Description Typical of 4 Projects

- Current Installation
- Issues
- Proposal
- Cost
- Benefits




Project Description Sullivan Substation

- Current Installation
 - PEC transmission service
 - 3 transformers, 1 spare
 - Capacity = 42.5 MW
 - Peak load = 30.1 MW
 - NCSU owns substation
- Issues
 - Transformers 40 years old
 - No redundancy for campus
 - Minor deterioration of transformer windings
 - Increasing risk of failure
 - Extended downtime


Project Description Sullivan Substation

- **Proposal**
 - Phase 1 – 42.5 MW transformer in parallel
 - Phase 2 – Replace existing transformers and switches
- **Cost**
 - Phase 1 - \$7,102,000
 - Phase 2 - \$5,144,000
- **Benefits**
 - Improved reliability and redundancy
 - Reduced risk and impact
 - Meet campus load growth




Project Description Centennial Substation

- **Current Installation**
 - PEC transmission line
 - Capacity = 21 MW
 - Peak load = 13.5 MW
 - PEC owns substation equipment
- **Issues**
 - NCSU vs. PEC ownership
 - 10 year build out = 38 MW
 - Demand will exceed capacity with additional 600 - 700k sqft
 - No redundancy – high risk
 - Easement negotiations
 - Service for Spring Hill and Varsity Drive




Project Description Centennial Substation

- **Proposal**
 - Phase 1 – NCSU owned 34 MW transformer in parallel with existing PEC MW transformer
 - Phase 2 – Purchase and upgrade PEC transformer/equipment
 - Phase 3 – Option for South Substation
- **Cost**
 - Phase 1 - \$ 3,080,000
- **Benefits**
 - Lower cost of power
 - Improved reliability and redundancy
 - Flexibility for future decisions of capacity, reliability, and energy strategies
 - Supports Master Plan for campus growth




Project Description Cates/Yarborough Plant Renovation

- **Current Installation**
 - Installed Capacity = 300,000 pph
 - Firm Capacity = 200,000 pph
 - 2006 Peak load = 180,000 pph
 - Age 32 to 56 years
 - Gas/ #6 fuel oil
- **Issues**
 - 2010 projected peak = 248,000 pph
 - 2030 projected peak = 300,000 pph
 - Firm capacity for reliability
 - Age/condition of existing boilers/equipment
 - Fuel strategy
 - Air Permit Impact




Project Description Cates/Yarborough Plant Renovation

- **Proposal**
 - Phase 1 - Replace 3 boilers in Yarborough 2008
 - Phase 2 - Replace Cates boiler 2017
 - Phase 3 - Add boiler in Yarborough 2029
- **Cost**
 - Phase 1 = \$17,445,000
 - LCC analysis completed
- **Benefits**
 - Meets firm capacity
 - Improved reliability
 - Improved efficiency
 - Supports Physical Master Plan



Project Description Cates/Yarborough Co-Generation

- **Current Installation**
 - No Co-Generation
 - No black start capability
 - Limited back up power
- **Issues**
 - Black start capability
 - Mission critical support
 - Diversity of energy sources
 - Carbon footprint
 - Energy Management Strategic Plan
 - Air Permit Impact



Project Description Cates/Yarborough Co-Generation

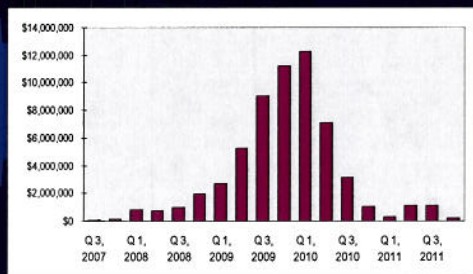
- **Proposal**
 - Replace boiler in Cates with 2 – 5.5 MW gas turbines and heat recovery boilers in 2010
- **Cost**
 - Capital \$27,930,000
 - Based on Net Present Value ROI = 14.1% 7 year payback
- **Benefits**
 - Acceleration of Cates boiler replacement
 - Provides black start capability
 - Provides emergency power
 - Demand management capability
 - Reduced carbon footprint
 - Educational resource



Project Summary Schedule

	2007			2008			2009			2010			2011			2012			
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
CBC Substation																			
Design																			
Construction																			
Sullivan Substation																			
Design																			
Construction																			
Centennial Substation																			
Design																			
Construction																			
Cates/Yarborough Plant																			
Design																			
Construction																			
Co-Generation																			
PC proposal & design																			
Construction																			

Project Summary Cash Flow



Project Summary Recommendations

- Sullivan Substation (\$7,102,000)
 - Install new 42.5 MW transformer in 2008
 - Replace existing transformers in 2013

Project Summary Recommendations

- Centennial Substation (\$3,080,000)
 - Install 34 MW transformer
 - NCSU own and operate transformer
- Cates/Yarbrough Plant Renovations
 - Replace Yarbrough boilers in 2009 (\$17,445,000)
 - Install Co-gen in Cates in 2010 (\$27,930,000)

Benefits

- Higher Reliability & Reduced Risk to Campus Assets and Programs
- Reduction of Deferred Maintenance Backlog Pressure on R&R Funds
- Energy Savings/ Higher Efficiency
- Reduced Carbon Footprint
- Time Window for Air Permits
- Leverage for Future Energy Issues
- Utilizes Traditional Project Delivery

Legislation

- Requests Debt Authority for \$53.3 mil
- Repayment through avoided cost of purchased utility payments
- Third Party Investment Grade Audit
- Annual Measurement & Verification
- Repayment is guaranteed by NCSU
- 19 Year Term
- Re-Investment of future savings in energy projects

Stakeholders

- OSBM
- Fiscal Research
- State Energy Office
- State Construction
- General Administration
- UNC Board of Gov.



Status of Legislation

- Submitted for Short Session
- Sponsors
- Legislative Agenda for NC State

