

Preliminary Version- Pending Commission Approval

Minutes of the Rhode Island Atomic Energy Commission

Meeting of 7 August 2009

Dr. Mecca called the meeting of the Rhode Island Atomic Energy Commission to order. Present were Commissioners: Dr. Mecca, Dr. Nunes and Dr. Nassersharif, and staff: Dr. Terry Tehan and Jeff Davis. Hank Bicehouse addressed the commissioners on re-licensing efforts before the meeting

1. Minutes of the 1 July 2009 RIAEC Meeting.

Dr. Nassersharif made a motion to accept the minutes. Dr. Nunes seconded the motion. The minutes of the meeting were reviewed. A Motion to accept the minutes passed unanimously. (Enclosure 1)

2. Dr. Mecca has asked Dr. Nassersharif to serve as Acting Chairman during the Chairman's sabbatical leave until mid-December.

3. Budget report- The Director presented the commissioners with an overview of this year's state budget. see enclosure 2

4. Facility Utilization Report- Jeff Davis presented a report on ongoing projects including the new federal equipment grant. Dr. Nassersharif discussed the MIT reactor operator program and stated the Ed Lau was willing to come to RINSC to help us start a similar program. Jeff

Davis will work with ED Lau on this project. The new counting room project was discussed. -see enclosure 3

5. Old Business

A. Meeting schedule-the next meeting will be scheduled in December when the Chairman returns.

B. Other

6. New Business-none

7. Dr. Nassersharif made a motion to adjourn. Dr. Nunes seconded the motion. The motion passed unanimously

Enclosure 1.

Minutes of the Rhode Island Atomic Energy Commission Meeting July1, 2009.

Dr. Mecca called the meeting of the Rhode Island Atomic Energy Commission to order. Present were Commissioners: Dr. Mecca, Dr. Kadak and Dr. Nassersharif, and staff: Dr. Terry Tehan,

1. Minutes of the 7 April 2009 RIAEC Meeting.

Dr. Nassersharif made a motion to accept the minutes. Dr.Kadak seconded the motion. The minutes of the meeting were reviewed. A Motion to accept the minutes passed unanimously. (Enclosure 1)

2. A discussion was held regarding the Assistant Director for Operations Positions.

3. Dr. Kadak made a motion to invite Michael J. Davis to serve as

Assistant Director for Operations. Dr. Nassersharif seconded the motion. The motion passed unanimously.

4. Dr. Nassersharif made a motion to assign Bruce MacGregor to Reactor Supervisor from Facility Engineer with Mr MacGregor's approval. Dr.Kadak seconded the motion. The Motion passed unanimously.

5. Dr. Nassersharif made a motion to submit a change to the job description for Facility Engineer to the Classified Personnel Board. Dr.Kadak seconded the motion. The Motion passed unanimously

6. The next Commission Meeting will be on Tuesday 4 August 2009 at the Nuclear Science Center.

7. Dr. Kadak made a motion to adjourn. Dr. Nassersharif seconded the motion. The motion passed unanimously

Enclosure 2 Budget report

To all: At the start of the fiscal year, here is where we stand:

General fund FY 2010- \$723,391- last FY -834,101 and we finished \$10,000 in the red despite really tough budgeting and cost cutting- we get no sympathy from budget because the rest of the executive branch is in as bad or worse shape. This problem is the result of the \$63 million unidentified savings that the legislature dumped on the

executive branch. The governor talks about more layoff days?

Federal grant funds-\$44,000 left in INIE and reactor sharing

\$10,000 coming in from Dr. Nassersharif grant to fund student reactor operator trainee

Setting up new grant account for \$246,000 for equipment under DOE infrastructure grant

\$76,941 being billed to URI in two payments for overhead charges (40% of payroll)

Capital project- \$50,000 in budget but must get approval from Sasse to spend. We are breaking up counting lab/clean room project into small MPA jobs in hopes of getting approval. First \$6,000 to finish gutting lab then \$8,800 for doorways. then onto electric, a/c and others

In Summary- another really tight year. The URI money will not cover the \$100,000 drop in state funding of the general account. I expect that we will run out of money in the middle of the fiscal year.

Encl;osure 3 Utilization report

From: Michael J. Davis

To: The Rhode Island Atomic Energy Commission

Date: 31 July 2009

Subject: Facility Utilization Status at RINSC

Current Utilization:

Education

Johns Hopkins University Center for Talented Youth Program

Johns Hopkins University has a program for talented youth that invites selected seventh to twelfth grade students from around the country to participate in a three week nuclear science course. There are two sessions of the course offered each summer, and they are hosted at Roger Williams University. This summer, the Rhode Island Nuclear Science Center is helping to support the course by providing tours, lectures, and demonstrations. It is anticipated that this collaboration will continue in the future.

Providence College Engineering Physics Department

Dr. Steve Mecca brought his Modern Physics class to RINSC for radiation safety training. Additionally, his class performed Ti wire activation and half life experiments.

Providence College Chemistry Department

Dr. John Breen brought his Chemistry class to RINSC and performed Ti wire activation and half life experiments, as well as activation analysis to determine impurities in various brands of Al foil.

Roger William University Chemistry Department

Dr. Nancy Breen brought his Chemistry class to RINSC and performed Ti wire activation and half life experiments, as well as activation analysis to determine impurities in various brands of Al foil.

Three Rivers Community College

Last fall a partnership had been developed between Three Rivers Community College and RINSC, with the agreement that RINSC would provide facilities and support for their Associate Degree program in Nuclear Engineering Technology. In December of 2008, Dr. James Sherard brought his class to RINSC and performed Ti wire activation and half life experiments. Later this summer, Dr. Sherard intends to meet with RINSC representatives to develop additional experiments for his fall class.

University of Rhode Island Mechanical Engineering Department

Nuclear Reactor Engineering Class

Dr. Bahram Nassersharif brought his Nuclear Reactor Engineering class to RINSC for radiation safety training. Additionally, the class performed Ti wire activation and half life experiments, as well as rod drop experiments.

Mechanical Engineering Design Class

Dr. Bahram Nassersharif assigned a group of four students from his Mechanical Engineering Design class to design and construct a modular, multi-head tool for performing fuel handling operations, and for picking up items dropped into the pool. This project has been completed.

Facility Tours

Jamestown Rotary Club

Narragansett High School

Nuclear Regulatory Commission

Dr. Bahram Nassersharif was awarded a multi-year NRC grant to develop a Nuclear Engineering minor at the University of Rhode Island. In May, the Nuclear Regulatory Commission sent three representatives to the University of Rhode Island to follow up on the grant. RINSC provided a brief tour and presentation to highlight the

laboratory training and experiments that had been performed in conjunction with the Nuclear Reactor Engineering Class, and to provide the representatives with insight about planned facility upgrades and additional experiments under development.

Paul Cuffee School

University of Rhode Island Chemical Engineering Department

University of Rhode Island Graduate School of Oceanography

Research

Mr. Jazwa

Mr. Jazwa has completed his Master of Science degree at the University of Rhode Island, and will be starting his Ph.D. program at Oregon State University in the fall.

Dr. Leith

Dr. Leith is currently collaborating with the Cleveland Clinic, RINSC, and Brown University to write an NIH grant proposal for testing cancer treatment drug testing in animals.

Dr. Nunes

Wide Angle Neutron Scattering

The wide angle neutron scattering instrument is on beam port L2. It is currently usable. Steve Guarino has set it up so that it can be controlled over the internet via Microsoft Remote Desktop software. Dr. Tony Nunes intends to use this instrument for scattering experiments as part of his physics laboratory class.

Small Angle Neutron Scattering

The small angle scattering instrument is on beam port R2. Steve Guarino has been working on making it operational. At present, he is working on solving a computer hardware problem.

Dr. Pszenny

Dr. Alex Pszenny is continuing his effort to obtain funding for his work involving halogen exchange between the ocean and the atmosphere.

University of Rhode Island Mechanical Engineering Department

Mr. Greg Kiernan from the University of Rhode Island Mechanical Engineering Department did a study to look at gamma radiation effects on the hardness of rubber gasket material. Irradiated reactor fuel was used as a gamma source. Two fuel elements were placed in

a storage rack next to the dry gamma tube, and the samples were placed in tube and lowered down to the level of the fuel elements. Doses were controlled by setting sample exposure time.

Service Work

BioPAL

BioPAL has continued to be RINSC's most consistent user. Here is a summary of their irradiations:

Year Rabbit Incore Total

1999 431 0 431

2000 16,469 0 16,469

2001 19,056 286 19,342

2002 20,285 722 21,007

2003 16,302 1,220 17,522

2004 16,056 2,420 18,476

2005 15,751 1,321 17,072

2007 13,848 832 14,680

2008 7,287 305 7,592

2009 5,144 213 5,357

Infocitex

Infocitex Corporation has a project in conjunction with the NASA to

study glass discoloration due to radiation exposure. NASA is interested in finding types of glass that have minimal discoloration to use in solar panels. Infoscitex completed their backlog of samples.

Rhode Island National Guard

Representatives from the Rhode Island National Guard, Rhode Island Emergency Management Agency, and the US Army Civil Support Readiness Group – Northeast Division came to RINSC for a tour, and to discuss the possibility of performing a training exercise at RINSC involving radioactive material.

Facility Upgrades

MWH Integrator

During the last NRC inspection, the inspectors suggested that RINSC look into the feasibility of adding a MWH integrator that would provide a more accurate estimate of the number of MWHs of

operation. This feature has been added to Control Rod Drive Display, and is currently being evaluated for accuracy.

Conversion of the Clean Room into a Counting Laboratory

RINSC received an equipment grant that will fund additional equipment for setting up a counting laboratory that can be used by students. Three additional student detectors and a smart board system have been funded for this room.

The room is in the process of being refurbished.

Cooling System Upgrade

RINSC received an equipment grant that will fund the upgrade of the cooling system so that it is an OPTO 22, digitally controlled system, similar to the control rod drive system.

RINSC Website

RINSC had hired a computer science student to develop a RINSC website that would be used for marketing, webcasting, and for remote access to the scattering instruments. Unfortunately, the student abandoned the project without leaving anything usable. RINSC has been working with the University of Rhode Island GSO Campus IT department to move forward on this project.

Beam Hall Addition

RINSC is working on an EPSCoR grant to fund the expansion of the confinement room to include a beam hall. The grant has a one million dollar funding limit, and is for the purpose of improving academic research infrastructure, and to promote partnerships with national laboratories. We believe that by enhancing our neutron beam infrastructure, RINSC will be in a position to act as a feeder laboratory for neutron scattering.