Community Advisory Council
March 10, 2005
Action Items/Notes

Final

These notes are in the following order:

1. Attendance
2. Correspondence and handouts
3. Administrative Items
4. Update on the BGRR, Fred Petschauer
5. NASA Space Radiation Program, Dr. Vazquez
6. Community Comment
7. Long-Term Response Actions, Bill Dorsch
8. Agenda Setting

1. Attendance

Members/Alternates Present:
See Attached Sheets.

Others Present:
M. Bebon, A. Carsten, F. Crescenzo, P. Chaudhari, J. Clodius, J. D'Ascoli, L. Dever, B. Dorsch, K. Geiger, U. Gerlach, L. Hill, B. Howe, S. Johnson, S. Kumar, A. McNerney, M. Parsons, F. Petschauer, K. Resc, S. Robbins, J. Tarpinian, M. Vazquez

2. Correspondence and Handouts

Items one through three were mailed with a cover letter dated March 4, 2005. Items four through seven were available at the meeting as handouts.

1. Draft agenda for March 10, 2005
2. Draft notes February 10 meeting
3. Final notes January 13 meeting
4. Copy the BGRR Update presentation
5. Copy of Dr. Vazquez's presentation
6. Copy of Long-Term Response Actions presentation
7. Copies of NASA Space Radiation Program Fact Sheet

3. Administrative

The meeting began at approximately 6:37 p.m. Jeanne D'Ascoli explained that Reed Hodgin had a family emergency and would not be attending. The CAC asked that their best wishes be conveyed to him. Jeanne agreed to send a card on behalf of the CAC. She went over the ground rules and the draft agenda. Those present introduced themselves. Frank Crescenzo reported that DOE Site Manager Michael Holland was on a six-week assignment at SLAC (Stanford Linear Accelerator Center, Menlo Park, CA.).

Dr. Chaudhari spoke about budget issues and the impact to the Lab. A number of activities are ending and whenever that happens there is usually a reduction in force (RIF). There are three projects ending this year. If the Lab does not manage environmental remediation in 2006 about

45 people will be laid off. The subcontracted work for the Spallation Neutron Source will be ending and 18 to 20 people will be no longer be needed. The High Energy Physics budget has been shrinking over time and will result in a RIF of 10 to 15 employees. A lot of activities are in transition and that affects workers in other areas such as the machine shop. About 18 people there will be affected. Dr. Chaudhari said approximately 145 people will be leaving in 2005.

For 2006, there are cuts to the Department of Energy's budget. The Office of Science was cut three percent. Combined with the cost of living increase that's about a six percent cut for the Lab. Translated to people that's about 100 to 125 employees. RHIC will be impacted as the running time has been cut 62% and that's significant. It effects the efficient functioning of the facility. The picture does not look good for FY 2006, we're hoping that Congress will add money to the science budget. There is strong support for science in Congress, there is hope that some of the funding will be restored.

Member Garber asked about the NIH and medical research conflict and if it was being reconciled. Dr. Chaudhari said the Office of Science has a small amount of money that is used for Medical Imaging. About $5 million a year comes to the Lab. This year the money was cut to $4.2 million and in 2007 it will go to zero. The cut posed a severe blow to the Medical Imaging Program here and at other Labs. We are hoping that the research continues to be funded while the philosophical issues are sorted out between NIH and DOE.

Garber asked if there was anything the CAC could do to help. Chaudhari said that members were free to write their representatives to let their opinions be known but that would be outside the scope of CAC's role.

Member Henigin asked for clarification on the numbers of layoffs. She asked if the 125 people being laid off as a result of the 6% budget cut was in addition to the 145 employees?

Dr. Chaudhari said that was a minimum. He said the next year will be difficult but spoke about the Center for Functional Nanomaterials and said there is a decision pending on replacing the National Sychrotron Light Source with a new facility. That decision will be made in the next four to six weeks. If it is positive, that's a $700 million project.

Sprintzen asked if there were different priorities emerging or is there a pattern that you can see that would be enlightening to us?

Chaudhari said that in the future he visualizes the Lab evolving from a focus on High Energy Physics and Nuclear Physics. He doesn't think there will be any new very large accelerators here because there isn't room for them. He sees science moving toward the physical sciences in the low energy regime, which is the science that dominates technology around the world and is concerned with materials. That science has to grow at the Lab and the Light Source is an example of that; it is used to study materials of many types. We need to strengthen that. The Lab needs to continue to add the basic energy sciences and then in time phase in Life Sciences, mostly biological sciences and computational sciences. That area is going to grow in this century and we want to shift toward that. There is activity here in both these areas but it's not large enough to sustain or support the Lab as it currently exists. The idea is to keep nuclear science strong, and look out for new opportunities. Start strengthening the basic energy sciences, the Nano Center, replacement of the Light Source, and then begin to look at the Life Sciences once the infrastructure here is strengthened.

Sprintzen asked about competition between the Lab and Cold Spring Harbor.

Chaudhari said that science is based on competition and if you're shy of competition you should not be in this game. It is healthy for science to compete because that's what brings out the best minds and keeps the pace of science moving forward. He's met with the President of Cold

Spring Harbor and talked about collaborating in some areas. He's also met with Stony Brook and NYU.

Member Garber asked about a neutron source to compliment the Light Source. Dr. Chaudhari said he thought Oak Ridge was doing that.

Iqbal Chaudhari asked if other Labs were doing medical science work and if they've gotten funding, and if the research was duplicative to what NIH is doing? Chaudhari explained that Brookhaven was the only Lab that got some funding for the work and it was not duplicative. NIH funds a portion of the work.

Jeanne briefly discussed the groundbreaking held for the Research Support Building.

The minutes from the February 10 meeting were approved with no changes or corrections. There was one abstention.

4. Update on the BGRR, Fred Petschauer

Fred Petschauer updated the CAC on the removal of the below-ground ducts and the path forward work activities. The Brokk machine has been used to remove the inner liner of the ducts. They've worked two shifts, six days a week for the past year. Twenty-five containers were filled with the liner material and shipped offsite. Next week removal of the canal will begin and a pocket of soil down about 25 feet is to be removed.

CAC asked questions about the contamination, when the project would be finished, they commented that the three curies removed seemed low, and if the Brokk machine would be used for the pile.

Petschauer said the contamination was primarily Cesium-137 and Strontium-90. The work described tonight should be done in May. The amount is small compared to the filter bank, but the material was surveyed and that's the amount that was there. Use of the machine is being considered.

5. Presentation on the NASA Space Radiation Program, Dr. Marcelo E. Vazquez

Dr. Vazquez, a NASA liaison scientist, described his background, the NASA program at Brookhaven, and his research. He gave an overview of the entire program. The new goal for NASA is to go back to the moon and beyond, eventually going to Mars. He spoke about the milestones and objectives of the program and how the risks are being assessed. His research is to try to identify and understand the biological effects of space radiation. More directly, he is trying to understand the affect of cosmic rays on brain function.

He said that Brookhaven is the only facility in world dedicated, in a small way, to understanding the affect of heavy particles, cosmic rays, on biological systems. Researchers from all over the country come to Brookhaven's NASA Space Radiation Laboratory to conduct research on cells. There are also physicists and science materials experts who bring shielding materials here to understand what the affect of the radiation is under shielding conditions.

Vazquez described the space environment and talked about the sources of radiation. He explained the current critical radiation risks and the experiments being done. He said that some of the affects of cosmic rays are unknown for certain areas such as cell damage. The research questions being asked are can the damaged cell function and can the cell repair itself.

Dr. Vazquez also spoke about the education component, which includes the Space Radiation Summer School where students come to learn the basics of space radiation biology and protection.

CAC members asked questions about the benefits of sending people to Mars, if there was any connection to the government's attempt to militarize space, if there are any environmental risks, about shielding for cosmic rays, materials for space suits, if the AGS booster time is cut back will it impact the program, are the flight schedules coordinated with solar cycle spots, and if the research will help the Earth. CAC members also expressed concern about simulating the radiation affect here and there being some impact to the neighborhood.

Vazquez said people can work faster than robotics. There was no connection that he knew of, the environmental consequences have been determined to be zero, there are no emissions, the work is done inside. Dr. Vazquez said shielding for cosmic rays may include a smart material, some kind of plastic that will acclimate the particles when they hit, hydrogen is very good at that.

There is some kind of relation to the solar cycle for the multi-year strategy but it's not strongly tied. Yes, if the AGS time is cut, it will hurt the program. The data being gathered can easily be translated to understand UV light or X-rays, and the basic knowledge will help understand how to get the cells to repair themselves. Dr. Vazquez explained that only very small amounts of radiation are used, it is only directed at specific targets, and is very short-lived. Dr Chaudhari explained how the Accelerator works and said there is no radioactive source used.

6. Community Comment

There were no comments from the audience.

After the break Member Mannhaupt asked about the attrition numbers, she asked if it was correct that 145 employees were going to be laid off this year. Dr. Chaudhari said yes that was correct. She asked from what area. Dr. Chaudhari began to describe the three areas, EM, … but Member Mannhaupt expressed grave concern over the EM layoffs and that DOE has not determined who will do the D&D work at the BGRR. She expressed strong support for the Lab continuing to do the cleanup work. Dr. Chaudhari said a decision has not yet been made. She asked if the CAC would have input and requested that the subject be put on the agenda for the next meeting.

7. Long-Term Response Actions (LTRA), Bill Dorsch

Bill Dorsch introduced himself and told the CAC that he has been working with the Environmental Restoration group onsite for about twelve years. He gave an overview of the how the Lab is transitioning to LTRA and discussed the Five-Year Site-wide Review. LTRA is the post-cleanup operation and maintenance, and surveillance and monitoring of the cleanup systems. He explained the scope of the work for the groundwater and soil projects and for reporting and mapping. Procedures will be developed to verify that work will be done safely and on-time. The transition is expected to be complete by October 2005, with the exception of the reactors. Once the decontamination is done, they will be added to the LTRA program.

Dorsch explained that EPA requires the Five-Year Review. It's being done this year because it is stipulated that when land use restrictions are placed on cleanup areas the review process is triggered. For the Lab, it was triggered in 2000 when landscape soils came up. It will be done every five years until all the cleanup goals are met and the land use restrictions are lifted. He described what the review will cover, the next steps, and the schedule. He said he would come back to update the CAC.

CAC members asked questions about possible findings, if inconsistencies were expected, and how many monitoring wells there are. Dorsch said they don't expect to find anything given the volume of data that's being continuously collected. He said there are over 1000 wells, 600 of them are tested for analytical data.

8. Agenda Setting

April Agenda
Urban Dispersion Program
CFN Science and Research
BGRR Discussion
ERD Closeout (May)

Member Garber requested that the CAC compose a letter protesting the funding cuts, specifically the PET cuts. The letter would be forwarded to the proper officials. After some discussion, it was agreed that this would be discussed at the April meeting.

The meeting adjourned at 9:05 p.m.

2005 Affiliation		First Name	Last Name	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Chart Key - P = Present															
ABCO (Garber added on 4/10/02)	Member	Don	Garber		P	P									
ABCO	Alternate	Thalia	Bouklas												
Brookhaven Retired Employees Association	Member	Graham	Campbell	P		P									
Brookhaven Retired Employees Association (L. Jacobson new alternate as of 4/99)(A. Peskin 5/04)	Alternate	Arnie	Peskin		P										
CHEC (Community Health & Environment Coalition (added 10/04)	Member	Sarah	Anker	P	P										
	Member	Adrienne	Esposito	P											
Citizens Campaign for the Environment (Ottney added 4/02-takenoff 1/05 Mahoney put on)	Alternate	Brendan	Mahoney		P										
E. Yaphank Civic Association	Member	Michael	Giacomaro	P	P										
E. Yaphank Civic Association (J. Minasi new alternate as of 3/99)	Alternate	Jerry	Minasi												
Educator	Member	Audrey	Capozzi			P									
Educator (B. Martin - 9/01)	Alternate	Bruce	Martin												
Educator (A. Martin new alternate 2/00) (Adam to college 8/01)(add. alternate 9/02)	Alternate	Adam	Martin												
Environmental Economic Roundtable (Berger resigned, Proios became member 1/01)	Member	George	Proios	P											
Environmental Economic Roundtable (3/99, L. Snead changed to be alternate for EDF)	Alternate	None	None												
Fire Rescue and Emergency Services	Member	Joe	Williams												
Fire Rescue and Emergency Services	Alternate	James	McLoughlin	P	P	P									
Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)	Member	Ed	Kaplan	P	P										
Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)(schwartz added 11/18/02)	Alternate	Steve	Schwartz												
Health Care	Member	Jane	Corrarino												
Health Care (as of 10/02 per JD)	Alternate	Mina	Barrett												
Huntington Breast Cancer Coalition	Member	Mary Joan	Shea	P		P									
Huntington Breast Cancer Coalition	Alternate	Scott	Carlin												

2005 Affiliation		First Name	Last Name	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Intl. Brotherhood of Electrical Workers/Local 2230	Member	Mark	Walker	P	P	P									
IBEW/Local 2230	Alternate	Philip	Pizzo												
L.I. Pine Barrens Society	Member	Richard	Amper	P											
L.I. Pine Barrens Society	Alternates	Jane Kathleen	Geary Timmins			P									
L.I. Progressive Coalition	Member	David	Sprintzen	P	P	P									
L.I. Progressive Coalition	Alternate	None	None												
Lake Panamoka Civic Association (Biss as of 4/02)	Member	Rita	Biss	P	P	P									
Lake Panamoka Civic Association (Rita Biss new alternate as of 3/99)	Alternate	Joe	Gibbons												
Long Island Association	Member	Matthew	Groneman												
Long Island Association	Alternate	William	Evanzia												
Longwood Alliance	Member	Tom	Talbot	P											
Longwood Alliance	Alternate	Kevin	Crowley												
Longwood Central School Dist. (switched 11/02)	Member	Barbara	Henigin	P	P	P									
Longwood Central School Dist.	Alternate	Candee	Swenson												
NEAR	Member	Jean	Mannhaupt	P		P									
NEAR (prospect taken off ¾)(blumer added 10/04	Alternate	Karen	Blumer												
NSLS User	Member	Jean	Jordan-Sweet	P	P										
NSLS User	Alternate	Peter	Stephens												
Peconic River Sportsmen's Club (added 4/8/04)	Member	John	Hall	P	P										
Peconic River Sportsmen's Club	Alternate	Jeff	Schneider		P										
Science & Technology (added 1/13/05)	Member	Iqbal	Chaudhry	P	P	P									
	Member	Jeffrey	Kassner												
Town of Brookhaven	Alternate	Anthony	Graves	P	P										
Town of Brookhaven, Senior Citizens	Member	James	Heil		P	P									
Town of Brookhaven, Senior Citizens (open slot as of 4/99)	Alternate	None	None												
Town of Riverhead	Member	Robert	Conklin	P	P	P									
Town of Riverhead (K. Skinner alternate as of 4/99)	Alternate	Kim	Skinner												
Wading River Civic Association	Member	Helga	Guthy	P	P										
Wading River Civic Association	Alternate	Sid	Bail												