Community Advisory Council October 14, 2010 Action Items/Notes



These notes are in the following order:

- 1. Attendance
- 2. Correspondence and Handouts
- 3. Administrative Items
- 4. Colliding Uranium Ions at RHIC, Thomas Roser, Chair Collider Accelerator Department
- 5. Community Comment
- 6. Frank Crescenzo, Defining roles for the Long Island Solar Farm project
- 7. Long Island Solar Farm Re-vegetation, Hank Zuretti, LISF Project Manager (BP)
- 8. Agenda Setting
- 9. CAC Discussion

1. Attendance

Members/Alternates Present:

See Attached Sheets.

Others Present:

M. Arens, S. Aronson, L. Bates, M. Bebon, M. Brill, H. Carrano, J. D'Ascoli, N. Detweiler, L. Garber, K. Geiger, D. Gibbs, T. Green, S. Johnson, M. Lynch, P. Maniscalco, R. McKay, P. Ressler, T. Roser, H. Zuretti

2. Correspondence and Handouts

Items numbered one through three were mailed with a cover letter dated October 7, 2010. Items numbered four and five were available as handouts at the meeting.

- 1. Draft agenda for October 14
- 2. Draft notes for September 9
- 3. Instructions for the NSLS II Tour
- 4. Presentation on Collisions of Uranium at RHIC, Thomas Roser
- 5. Article from EM Recovery Act Newsletter, "Brookhaven Lab on Track to complete Legacy Environmental cleanup in 2011"

3. Administrative Items

The meeting began at 6:31 p.m. Reed Hodgin, facilitator, reviewed the ground rules and the agenda. Those in attendance introduced themselves.

Approval of Minutes

Hodgin asked for corrections, additions, or deletions to the September 9, 2010 draft notes. Member Blumer said that on page 4, her comment was regarding the techniques the Lab is using for deforestation and site access. Member Ormand said his name was misspelled. Member Chaudhry said that on page 7 his accolades to the Lab were understated. He said the work the Lab is doing on clean up is very good and the work at keeping the CAC informed is excellent. Doon Gibbs said he was misquoted on page 5 as saying; this money is dedicated to

high energy problem solving. It should say; this money is dedicated to high capacity energy storage. The notes were approved as amended with none opposed and 3 abstentions.

Jeanne D'Ascoli announced that she will be stepping down as liaison to the CAC. Nora Detweiler will be the new liaison beginning next month. She said she will still attend the meetings, but in a different role. Her new focus will be more on communicating science.

Member Sprintzen expressed his appreciation to D'Ascoli for her service during the past 12 years.

Member Guthy wished D'Ascoli much luck in her future endeavors.

D'Ascoli said this is an exciting time and she is looking forward to it, but she will always be a part of the CAC.

Member Sprintzen said the CAC has discussed how to represent the Lab to the community and this will be part of that effort.

Member Birben said she can help by posting information in her local paper on how the Lab is communicating science to the community.

4. Colliding Uranium Ions at RHIC, Thomas Roser, Chair, Collider Accelerator Dept.

Thomas Roser discussed the discoveries with collisions of gold at RHIC, why uranium beams will be useful for RHIC science, and EBIS, the new beam source for RHIC, with the CAC. He said that there have been many discoveries using the collision of gold ions at RHIC and explained that uranium beams will be useful for science discoveries because the collisions will produce much higher energy density of matter. He said gold ion collisions have used less gold than is found in a single wedding ring over ten years of operation. He said that the amount of uranium used will be extremely small and not pose any radiation or any other risk to Brookhaven Lab staff or to the public. He said a handful of soil typically has more naturally occurring uranium than will be used at RHIC in a year. He also said RHIC will be using the dominant naturally occurring form of uranium, U-238, which cannot be "split" and sustain a nuclear chain reaction like U-235, the fuel that is used in nuclear reactors.

Roser explained RHIC operations, protons, strong force, the big bang, producing and exploring a new state of matter at RHIC, hard scattering, and studying the bubbles of broken mirror symmetry. He described the new Electron Beam Ion Source (EBIS) that is very compact and much smaller than the Tandem Van de Graaf.

Member Shea asked where this research is leading. What do you hope to discover in 10 years time?

Roser said this is the study of the strong force. It is quite unique. Our aim is to understand what matter looks like with this type of force. There is no practical application right now, but its impact on other areas of science could be quite profound.

D'Ascoli told the CAC that this topic was put on the agenda because she thought that the CAC might be concerned over the use of Uranium-238 and wanted to keep them informed.

5. Community Comment

Peter Maniscalco, environmental activist and educator, addressed the CAC. He requested that the CAC make a recommendation to Lab management regarding the Long Island Solar Farm. He proposed that before the trees are cut down to make room for the solar farm, a ceremony be

held to honor their spirits. He has contacted a Native American spiritual elder who is willing to conduct the ceremony if asked by the Laboratory.

Member Jordan-Sweet asked him to describe what the ceremony would be like.

Maniscalco said it is a sacred pipe ceremony to communicate with the heart and spirit of the trees.

Member Blumer asked how this plan fits in with the current plan if they allow the root systems to stay intact.

Maniscalco said the lives of the trees will still be taken.

Member Sprintzen said he does not feel it is the Lab's responsibility to promote this type of thing and suggested they hold the ceremony on their own property.

Member Henagan asked what the tribal affiliation was.

Maniscalco said Shinnecock.

Member Birben asked if the ceremony could be held off-site.

Maniscalco said yes, but he feels it should happen here on site.

Member Shea asked how long the ceremony is and how many people would take part in it.

Maniscalco said it will last 30 – 45 minutes. He doesn't anticipate many people in attendance and said the CAC should attend to experience it.

Member Blumer asked if we can return to this topic after the presentation.

Reed asked if this is an issue that the CAC would like to discuss and make a recommendation on.

Member Esposito said she would like to discuss it after the presentation.

Member Jordan-Sweet asked if this is something the Lab would consider doing.

Reed said that it would be discussed further later on in the evening.

6. Frank Crescenzo, Defining roles of BP, LIPA, BNL and DOE on the Long Island Solar Farm (LISF)

Frank Crescenzo, Department of Energy Project Manager for the Long Island Solar Farm project (LISF) explained that there is a contract between the Long Island Solar Farm and Long Island Power Authority for the project. The Department of Energy and Brookhaven Science Associates are not part of that contract. The solar farm is located on DOE property at Brookhaven National Laboratory. There will be access to that property through an easement that the DOE has loaned to the LISF. There are certain requirements that LISF has to abide by to use the easement, but this is not a contract. DOE's ability to direct BP and LISF is limited. The Laboratory has no authority over their activities. This will be a separate activity with its own entrance and security. The research agenda will be a separate agreement between LISF and BNL. LISF will provide resources to BNL so research can be conducted on a solar array.

Member Jordan-Sweet asked if there is an agreement on the state of the property when it is returned to DOE.

Crescenzo said yes, there is, but it is not specific.

Member Esposito asked if there is an option to continue the project after the 20 years.

Crescenzo said there was.

7. Long Island Solar Farm Re-vegetation, Hank Zuretti, LISF Project Manager (BP)

Hank Zuretti gave the CAC an overview the LISF project. He explained that it is uniquely shaped by the environment. The goal was to not disturb the Core Pine Barrens, leave a 1,000 foot radius for the tiger salamander area, and leave 100 foot setback from the wetlands. He said 164,000 solar modules will be mounted on 6,800 racks providing 37 megawatts of power, making this the largest solar installation on the east coast of the United States. He said the maximum height was determined by the wind zone the site is located in and the minimum height by the height of the native grasses. Zuretti said that first the land will be cleared and grubbed, which is a requirement of the project because if the understory is allowed to remain as it is, it will dominate and block the array.

Member Esposito asked if the root structure will be left intact.

Zuretti said no, it is not possible.

He said the smaller vegetation and the stumps will be mulched. We hope to reuse the mulch on the site by spreading it out on the ground below the array. We will then fill the depressions caused by the stumps and do some minor grading. The array will mostly follow the contour of the land. We will apply native seed mix. We will take the marketable wood that can be used for lumber, firewood, or mulch and possibly sell it.

Member Esposito asked who would keep the money from the sale of the wood.

Zuretti said that has not been determined yet. We are trying to reuse it in a green way even if it costs a little more. The soil will be loose from the tree clearing and vulnerable to wind and water erosion. Grass vegetation will stabilize the ground and the NYSDEC has required in our permit that we stabilize the ground.

Mark Brill, LISF Project Engineer, told the CAC that he is responsible for the vegetation plan. He said experts were consulted and 139 species of grass were considered. We were looking for certain requirements and narrowed it down by the following criteria: The grass had to have a 2-foot height maximum, be shade and drought tolerant, be commercially available, and easily sowable. There were two types of grass identified that fit the criteria; panthrush and autumn bentgrass.

Reed said this presentation was for information purposes only. There is no request for a recommendation from the CAC on this topic from the Lab or from BP. There is an approved plan in place already.

Member Blumer made a request that this go further than just informational. She said the understory, if it were allowed to return, would be less than 2 feet high. The trees if they return would be very slow growing and if they were clipped every few years could be kept at a controlled height. Then when this is over, the system would be in place to return to normal.

Brill said they will be disturbing 6 inches of soil and it is feasible that in 20 years some of that growth would come back and that would be encouraged. However, the land needs to be controlled right now. Our purpose is to be self maintaining so we don't have to trim or mow as often. By the time we leave, we need to have grass in place to stabilize the soil. That is one of the DEC's requirements.

Member Anker asked if this is sustainable in our ecosystem. Have you thought about how you will be affecting the ecosystem? I would hope you would use more of the native lowbush blueberry rather than grass.

Zuretti said that had been considered. The intent is to affect the environment as little as possible, however, lowbush blueberry has to be planted in plugs, not seeds.

Brill said the experts were consulted and it was not feasible. This will be a different ecosystem. We are trying to respect the environment. There will be holes in the fence so small animals can get through while still keeping the deer out.

Member Anker asked if pesticides or fertilizers will be used.

Brill said no.

Member Guthy asked if you can start with grass and then introduce the blueberry or other native plants. If they do come up, will you cut them?

Zuretti said if they come up naturally and stay under the 2 feet, we will leave them alone.

Member Garber said in the Southampton Pine Barrens there are indigenous dwarf pine trees. He asked if that can be considered.

Brill said if they remain under 2 feet we can consider it.

Member Heil asked Member Blumer if the native plants she mentioned would do well in the shade.

Member Blumer said yes, they would be a perfect choice if allowed to self-restore and remain under two feet tall.

Member Esposito said this solar farm may last longer than 20 years so we are not preparing the land to be a forest in 20 years. The land is being prepared to be a productive solar farm.

Member Henagan said most of this area was not a natural forest. The trees are too close together to have a viable understory. This project will be returning the area to natural grassland.

Member Blumer asked what portion of this area is planted compared to natural forest area.

Tim Green said 65 acres is CCC, 40 acres is from the former biology fields, 5-10 acres are nursery trees, and the remainder is rough restoration. Approximately 60-75% has already been highly disturbed.

Member Blumer said if you want to be green, why plant anything. The natural prairie will come back.

Zuretti said the ground needs to be prepared. The DEC is requiring that we stabilize the soil. Other things can grow up over time as long as it all stays under 2 feet.

Brill said things other than grass had been considered.

Member Anker asked what precautions are being taken for insect control in the woodchips. She also asked about the possibility of invasive species.

Zuretti said there will a very thin layer of mulch used and the experts have said if this grass is a dominant species it will keep the invasive species out.

Brill said by planting native species and allowing local wildlife to enter through the small holes in the fence we hope to prevent a lot of issues.

Member Jordan-Sweet asked if anything will grow under fresh mulch.

Brill said it will be a thin layer of mulch so we won't have that problem.

Member Esposito asked for an update in a year or two to inform the CAC what is growing or not growing. Perhaps some of these concerns will not be an issue.

Reed said someone will come back to keep the CAC posted on the various aspects of the project.

8. Agenda Setting

Jeanne D'Ascoli said there are two topics the Lab would like to present to the CAC; the closure of the BGRR and HFBR and a brief presentation on the SER. Next month's meeting will be on November 4 and we will have a holiday party at the December meeting.

9. CAC discussion on the community comment from Peter Maniscalco

Member Sprintzen said this land is not sacred and we need to be careful not to treat it as though it were.

Maniscalco said he wanted to clarify that he is not saying the land is sacred, nor is he opposing this project. He said this ceremony is a beautiful way to see the reverence of a human being that really understands the connection to nature.

Member Birben asked what the Director thought about the request.

Sam Aronson, Lab Director, said in the past this type of request has been considered and turned down. He said he would speak to the site manager. This is between LISF and DOE. He said he is interested, however, in how this will get resolved.

Member Birben asked for clarification on whether or not this is part of Lab property.

Aronson said for the duration of the easement, that land has nothing to do with Lab activities. The Lab is housed on government property and the use of part of the land has now been given to someone else.

Member Esposito said that they will have to go through Lab property to get to their part of the land.

Aronson said actually they won't have to. They will have their own entrance on North Street. However, it is possible that they may at times use our entrance. He said he is interested in how this will be resolved, but sees it as an observer, not an actual participant in the decision-making process.

Member Heil asked when the first tree is scheduled to come down.

Zuretti said November.

Member Sprintzen said from a community relations point of view, there is probably good reason to respond to a concern from a community member, but it could be publicly perceived that the Lab approves of this kind of thinking.

Member Chaudhry said the CAC interacts with the Lab on science issues. Emotional and spiritual issues are not part of this forum.

Member Shea said she thinks trees are part of science and nature. She said this won't involve many people and won't be publicized.

Member Jordan-Sweet said perhaps you need to approach LIPA and BP Solar with this request.

Member Esposito said she would advise the Lab to let the ceremony be held. The Lab will look good and there is no harm done. Just say no press and no delay or harm to project.

Member Henagan said as a person of Indian descent, he honors his ancestors. As a scientist, he finds this idea offensive.

Member Anker said it is a beautiful idea. She would consider opening it up to other groups.

Reed thanked the CAC for their comments and said Member Blumer has a final comment on the issue of re-vegetation at the LISF.

Member Blumer said we are here to be informed. Maybe the BP Solar Farm is too far along now for us to have any input. She asked that In the future the CAC have more input earlier in the process when things are first being considered.

Reed said we can put that discussion on the agenda for next month.

The meeting adjourned at 9:23 p.m.

P = Present 2010 Affiliation		First Name	Last Name	Jan	Feb (canc elled)	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
ABCO (Garber added on 4/10/02)	Member	Don	Garber	Р		Р	Р	Р	Р				Р		
ABCO (Madigan added 10/10)	Alternate	Michael	Madigan										P		
Brookhaven Retired Employees Association (Peskin replaced Campbell 09/09)	Member	Arnie	Peskin			Р	Р	Р	Р						
Brookhaven Retired Employees Association (L. Jacobson new alternate as of 4/99)(A. Peskin 5/04)(Franz 12/09)	Alternate	Eena-Mai	Franz				Р	Р	Р			Р	Р		
CHEC (Community Health & Environment Coalition (added 10/04)	Member	Sarah	Anker	P		Р	Р	P	P				Р		
(added 12/08) (R. Andrejkovics removed 9/09)	Alternate														
Citizens Campaign for the Environment	Member	Adrienne	Esposito	Р		Р	Р	Р	Р			Р	Р		
Citizens Campaign for the Environment (Ottney added 4/02-taken off 1/05 Mahoney put on)(7/06 add Kasey Jacobs)(K. Jacobs off 1/08)	Alternate														
Colonial Woods Whispering Pines (added 06/09)	Member	Christine	Birben	Р		Р	Р	Р	Р			Р	Р		
Colonial Woods Whispering Pines (added 09/09)	Alternate	Joan	Milner												
E. Yaphank Civic Association	Member	Michael	Giacomaro	Р		Р	Р	Р	Р						
E. Yaphank Civic Association (J. Minasi new alternate as of 3/99) (M. Triber 11/05) (Munson 6/06) (Feinman 2/09)	Alternate	Bob	Feinman	Р		Р	Р	Р	Р						
Educator (changed 7/2006)(Bush member 5/10)	Member	Greg	Bush			Р	Р	Р					Р		
Educator (B. Martin - 9/01)	Alternate	Bruce	Martin										Р		
Educator (A. Martin new alternate 2/00) (Adam to college 8/01)(add. alternate 9/02) (changed 7/2006)(Bush 5/09)	Alternate	Adam	Martin												
Fire Rescue and Emergency Services	Member	Joe	Williams												
Fire Rescue and Emergency Services	Alternate	Don	Lynch												
Fire Rescue and Emergency Services	Alternate	James	McLoughlin												
Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)	Member	Ed	Kaplan			Р									
Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)(Schwartz added 11/18/02)	Alternate	Steve	Schwartz					Р	Р						
Health Care	Member	Jane	Corrarino												
Health Care	Alternate														
Huntington Breast Cancer Coalition	Member	Mary Joan	Shea			Р	Р	Р	Р			Р	Р		
Huntington Breast Cancer Coalition	Alternate	Scott	Carlin												
Intl. Brotherhood of Electrical Workers/Local 2230 (S.Krsnak replaced M. Walker 1/11/07)	Member	Scott	Krsnak				Р	Р	Р						

				Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
P = Present 2010 Affiliation		First Name	Last Name		(canc elled)							·			
IBEW/Local 2230	Alternate	Philip	Pizzo												
L.I. Pine Barrens Society	Member	Richard	Amper	Р											
L.I. Pine Barrens Society (added P. Loris 6/05)(Alayeva off 6/08) (Itriyeva 02/09) (Motschenbacher 6/09)	Alternate	Beth	Motschenbacher			Р	Р	Р				Р	Р		
L.I. Progressive Coalition	Member	David	Sprintzen	Р			Р	Р				Р	Р		
L.I. Progressive Coalition	Alternate	None	None												
Lake Panamoka Civic Association (Biss as of 4/02) Lake Panamoka Civic Association (Rita Biss new alternate as	Member	Rita	Biss	Р		Р	Р	Р				Р	Р		
of 3/99) (Gibbons off 1/10)(Grandel added 10/10)	Alternate	Bonita	Grandel										Р		
Long Island Association (Groneman replace 10/05)	Member														
Long Island Association	Alternate	William	Evanzia												
Longwood Alliance	Member	Tom	Talbot	Р		Р	Р	Р	Р			Р			
Longwood Alliance	Alternate	Kevin	Crowley												
Longwood Central School Dist. (switched 11/02)(Castro replaced Henigin 6/09)	Member	Maria	Castro	Р		Р	Р	Р	Р				Р		
Longwood Central School Dist.	Alternate	Allan	Gerstenlauer												
NEAR	Member	Jean	Mannhaupt			Р	Р	Р	Р						
NEAR (prospect taken off ¾) (Blumer added 10/04)	Alternate	Karen	Blumer			Р						Р	Р		
NSLS User	Member	Jean	Jordan-Sweet	Р			Р	Р	Р				Р		
NSLS User	Alternate	Peter	Stephens												
Ridge Civic Association	Member	Pat	Henagan	Р		Р	Р					Р	Р		
Science & Technology (added 1/13/05)	Member	Iqbal	Chaudhry			Р	Р	Р	Р			Р	Р		
Town of Brookhaven (Graves made member 6/06)	Member	Anthony	Graves	Р		Р	Р	Р	Р						
Town of Brookhaven (Ormond 9/10)	Alternate	Luke	Ormand									Р	Р		
Town of Brookhaven, Senior Citizens	Member	James	Heil	Р		Р	Р		Р			Р	Р		
Town of Brookhaven, Senior Citizens (open slot as of 4/99)	Alternate														
Town of Riverhead	Member														
Town of Riverhead (K. Skinner alternate as of 4/99)	Alternate	Kim	Skinner												
Wading River Civic Association	Member	Helga	Guthy	Р		Р	Р	Р				Р	Р		
Wading River Civic Association	Alternate	Sid	Bail												