

**Community Advisory Council
June 13, 2013
Action Items/Notes**

Final

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. BNL Solar Energy and Smarter Grid Research Update
5. Community Comment
6. Agenda Setting
7. Ticks and Tick Borne Disease Awareness

1. Attendance

Members/Alternates Present: See Attached Sheets.

Others Present: J. Carter, N. Detweiler, M. Giacomaro, M. Israel, S. Johnson, R. McKay, P. Paul

2. Correspondence and Handouts

Items numbered one and two were mailed to Members with a cover letter dated June 6, 2013. Items three through six were available as handouts at the meeting.

1. Draft agenda for June 13, 2013
2. Draft notes for May 9, 2013
3. Copy of presentation: BNL Solar Energy and Smarter Grid Research Update, Pat Looney
4. Copy of presentation: Ticks and Tick borne Disease Awareness, Tim Green
5. Summer Sunday flyers
6. Copies of BNL's Water Quality Consumer Confidence Report

3. Administrative Items

The meeting was called to order at 6:31pm. Reed Hodgkin, facilitator, reviewed the ground rules and the agenda. Those in attendance introduced themselves.

John Carter, U.S. Department of Energy Brookhaven Site Office, said that starting on Monday, Bob Gordon is the new DOE Site Office Deputy Manager.

Nora Detweiler, liaison to the CAC, explained that no one from upper management was at this evening's meeting because they are all in Washington DC. She said the presentation scheduled to be given by Berndt Mueller has been re-scheduled for September. She also said the CAC will not be meeting during the months of July and August. She invited everyone to come to the Lab on Summer Sundays and said flyers are available.

Detweiler explained that the move of the Muon g-2 has been postponed due to weather related issues. It will now take place on Saturday, June 22nd from 9am – 12 noon onsite. She said that anyone interested in watching the move take place should be at the Laboratory, parked in the Berkner parking lot, no later than 9:15 a.m. and she suggested everyone bring lawn chairs. She then showed a short video clip of the g-2 being moved out of the building through a mail slot. She said there will be a rolling blockade as it moves down William Floyd Parkway; the road will not be entirely closed. Suffolk County Police Department put out a press release to local

agencies regarding the partial closures of the roadway on the southbound side of the parkway and will also be sending out a reverse 911 call to those impacted by the road closure.

Approval of Minutes

Hodgin asked for corrections, additions, or deletions to the May 9, 2013 draft notes. Member Peskin said that on page two, his comment should read - Member Peskin asked if the CAC could be identified as a party of interest - rather than be part of the process. The notes were approved as amended with none opposed and three abstentions.

Detweiler then showed the CAC a video clip (Smashing Matters) that was made in response to questions received from the CAC and elsewhere regarding the Relativistic Heavy Ion Collider. She said there is more information available on the smashingmatters.org website.

4. Brookhaven National Laboratory Solar Energy and Smarter Grid Research Update - Pat Looney, Chairman – Sustainable Energy Technologies Department

Pat Looney gave the CAC some background information on the Long Island Solar Farm (LISF). He said BNL is collecting and storing LISF data that will be made available for research purposes. He spoke about the solar irradiance comparison for sunny vs. cloudy days and the power output and ramps during cloud transients. He said Total Sky Imagers (TSI) provide information about cloud location, size, and brightness. BNL is also developing the Northeast Solar Energy Research Center (NSERC), which will include renewable generation on the BNL grid and will enable using the site as a microgrid test bed. He said BNL is installing smart sensors in the campus electrical network as part of the smarter grid research agenda. BNL will evaluate how advanced monitoring and modeling can be used to better manage distribution systems.

Member Peskin asked about safety.

Looney said electrical safety is important and all work being done has to pass a review.

Member Kaplan asked what percentage of the solar panels are fixed.

Looney said they all are.

Member Kaplan then asked why there is concern about the vertical structure of clouds if all the panels are fixed.

Looney said as clouds move across the sky, some panels get shaded. The utility needs to be able to make up for that loss of power. Something else has to come in fast as the power drops.

Member Kaplan said to get the optimum efficiency you need panels that can move.

Looney said we have trackers that do that, but can't keep up with the fast variations. This tool is for dispatchers of electric power to help them keep the system stable.

Member Talbot asked if this is a research project.

Looney said the Long Island Solar Farm could only be here if it had a research component.

Member Chaudhry asked about the bids that were received for the research array.

Looney said they did not meet our expectations. The construction contract has not been awarded yet.

Member Sicignano asked if there are problems introducing solar power to the grid.

Looney said it can cause operational problems locally. The challenge is how to best serve everyone's needs and make the system stable.

Member Sicignano asked about the value of the solar farm and if it has paid for itself.

Looney said the LISF was a contract with LIPA. They will do a cost benefit analysis.

Member Birben asked about SGRID³. It seems there are a lot of similarities.

Looney said SGRID³ is an initiative to improve the reliability of the electrical grid in the northeast. We will study grid research, restoration, etc.

Member Madigan asked if they will be studying battery storage.

Looney said yes.

Member Madigan asked about using compressed air.

Looney said compressed air is slow acting.

Steve Walker, a community member, asked if anyone has looked into micro-inverters.

Looney said we are interested in them. They can be more efficient, but have a higher replacement cost. Micro-inverters operate on one single panel. If you put them on all the panels, it would be more efficient.

Peter Paul asked if the solar array can feed into a large inductive lead.

Looney said they are all fixed power factor. We want to test others.

Member Giacomaro asked if each inverter is single phase.

Looney said they are three-phase.

5. Community Comment

Michael Giacomaro, East Yaphank Chamber of Commerce, thanked the CAC for their support during his request for membership, which was denied. He said he will be back again in the future to make another request.

6. Agenda Setting

Detweiler said the next meeting, which will be on September 12, 2013 is the 15th anniversary of the CAC and we will be having a celebration. Berndt Mueller will give a presentation and there will also be a presentation on the Lab's Sustainability Plan.

7. Ticks and Tick Borne Disease Awareness – Tim Green, Environmental Protection Division

Tim Green spoke about the risk of Lyme and other tick borne diseases. He said Suffolk County has one of the highest Lyme disease case rates in the US. During the summer, we need to watch for larval ticks, even though they do not carry disease, their bite causes intense itching. He gave some tips on reducing the risk of being bitten and what to do if you find a tick has attached itself to you. He explained how to recognize the symptoms of a tick borne illness and the possible treatments. Green then spoke about the 4-Poster systems being used at the Laboratory to treat deer with permethrin, which kills ticks. He spoke about permethrin coated clothing and the use of a lint roller to remove small ticks after possible exposure.

Member Birben asked what degree of moisture ticks require and if they can live and lay eggs indoors.

Green said they require 30% humidity. Lone star ticks are more resistant to low humidity than deer ticks. Deer ticks are susceptible to dryness. If they engorge and fall off in your house they could lay eggs. But it's not likely and the way to prevent it is to check your pets.

Member Birben asked if the Lab shares information with the CDC.

Green said the only data we are collecting is associated with the 4-Poster systems. The data will get reported on an annual basis to the NYSDEC. Because we do keep track of anyone that goes to the clinic to have a tick removed, we are reporting that information to them as well.

Member Kaplan asked if ticks will wash off with water and if DEET will kill them. Do doctors check for other tick borne diseases, or only Lyme disease?

Green said ticks will wash off if they haven't already attached to you. DEET does not kill them, but will deter them. He said, the medical profession needs to be more educated on tick borne illnesses and mentioned the Suffolk County Task Forces.

Member Heil asked about the effectiveness of aerial spraying on residential lots.

Green said it is not very effective. Ticks are difficult to manage.

Member Henagan said when people are visiting the Lab they need to be made aware of the presence of ticks.

Member Ziems asked if the County will spray.

Green said homeowners need to hire their own pesticide applicator.

Member Ravel asked if permethrin is toxic to beneficial pollinators.

Green said the 4-Poster system is a targeted approach and shouldn't affect other insects.

Detweiler asked Green to give an update on the tree bronzing that occurred last fall.

Green said that around the first week of May, the needles started dropping off the pine trees from the bronzing that resulted from Superstorm Sandy. New needles are now sprouting and most of the trees will come back.

The meeting adjourned at 9:11p.m.

Agenda Topics Exercise
April 11, 2013

Biological Research at BNL - 8
~~Cyber Security & BNL~~ – 7 (May 9, 2013)
~~Ticks & Tick Research~~ – 8 (June 13, 2013)
Quantum Physics - 7
Battery Advances & Research - 6
Nanotechnology - 7
BNL & Higgs Boson - 4
Progress Report on Blueprint - 4
~~Update on Solar Farm~~ – 5 (June 13, 2013)
Sustainability - 4
Impacts of Politics on Science - 4
Computational Science - 3
Overview of Science Programs at ISB - 4
Update on Fukushima – Lab Work – 3
Nuclear Safety - 3
Physics Research at BNL - 2
Intellectual Property - 2
~~Tree Bronzing~~ – 1 (June 13, 2013)
Fluctuations in Vacuum - 1
Impact of Fukushima Radiation - 1
Thorium Reactor Energy
Nuclear Energy

P = Present	2013	Affiliation		First Name	Last Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
		ABCO (Garber - 04/02)	Member	Don	Garber												
		(Madigan -10/10)	Alternate	Michael	Madigan	P			P	P							
		American Physical Society	Member	Margaret	Malloy	P		P	P	P	P						
			Alternate														
		Brookhaven Retired Employees Association (Peskin - 09/09)	Member	Arnie	Peskin			P	P	P	P						
		(Franz - 12/09)	Alternate	Eena-Mai	Franz		P	P			P						
		(Shapiro-1/13)	Alternate	Steve	Shapiro	P											
		Citizens Campaign for the Environment	Member	Adrienne	Esposito		P	P	P	P							
			Alternate														
		Colonial Woods Whispering Pines (Birben - 06/09)	Member	Christine	Birben		P		P	P	P						
		(Rehbein -11/10)	Alternate	Eric	Rehbein	P	P			P	P						
		Coram Civic Association (Ziems - 06/12)	Member	Paul	Ziems	P	P	P	P	P	P						
		(Meade – 06/12, Jim M 10/12)	Alternate	Jim	Meade												
		East Yaphank Civic Association	Member	Michael	Giacomaro	P	P	P	P	P							
		(Feinman - 02/09)	Alternate	Bob	Feinman	P	P	P	P	P	P						
		Emeritus (changed 3/8/12)	Member	Jean	Mannhaupt												
		Friends of Brookhaven (Kaplan - 07/01)	Member	Ed	Kaplan	P		P			P						
		(Schwartz - 11/02)	Alternate	Steve	Schwartz			P		P							
		Huntington Breast Cancer Coalition	Member	Mary Joan	Shea	P		P		P							
			Alternate	Scott	Carlin		P										
		IBEW/Local 2230 (Krsnak 01/07)	Member	Scott	Krsnak	P											
			Alternate														
		Individual (changed 3/12)	Member	Karen	Blumer												
		(added 6/12)	Alternate	Michael	Madigan			P			P						
		Individual – (changed 3/12)	Member	Greg	Bush												
			Alternate	Adam	Martin												
			Alternate	Bruce	Martin												
		Individual – (changed 3/12)	Member	Jane	Corrarino			P									
			Alternate														
		Individual – (changed 3/12)	Member	Iqbal	Chaudhry	P		P	P		P						
			Alternate														

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		L.I. Pine Barrens Society	Member	Richard	Amper	P	P										
		(Murdocco - 04/11, deleted 6/12) (Muller added – 8/12)(Katie Rose Leonard added – 6/13)	Alternate	Katie Rose	Leonard	P		P	P		P						
		L.I. Progressive Coalition	Member	David	Sprintzen	P		P	P	P	P						
			Alternate														
		Lake Panamoka Civic Association (Biss - 04/02)	Member	Rita	Biss					P	P						
		(Grandal - 10/10)	Alternate	Bonita	Grandal		P			P	P						
		Longwood Central School Dist. (Castro -06/09)	Member	Maria	Castro												
			Alternate	Allan	Gerstenlauer												
		Mastic Park Civic Association (Sicignano – 6/12)	Member	John	Sicignano			P			P						
			Alternate	Clara	McManus												
			Alternate	Joe	May					P							
		Middle Island Civic Association	Member	Tom	Talbot	P	P	P			P						
			Alternate	Kevin	Crowley												
		NSLS Users Committee	Member	Jean	Jordan-Sweet	P	P	P	P								
		(Ravel -02/11)	Alternate	Bruce	Ravel						P						
		Ridge Civic Association	Member	Pat	Henagan	P	P	P	P		P						
			Alternate														
		Town of Brookhaven (Graves - 06/06)	Member	Anthony	Graves												
			Alternate														
		Town of Brookhaven, Senior Citizens Office	Member	James	Heil	P		P		P	P						
			Alternate														
		Town of Riverhead (Doroski - 04/11)	Member	Isidore	Doroski	P			P	P							
		(Hulme - 04/11)	Alternate	Suzanne	Hulme			P		P							
		Wading River Civic Association	Member	Helga	Guthy		P	P	P	P							
			Alternate	Sid	Bail												