

**Community Advisory Council
May 12, 2016
Action Items/Notes**

Final

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. BNL's Environmental Management System – External Audit Results and Future Changes - Deborah Bauer, Environmental Compliance Reps Group Manager, Environmental Protection Division
5. Agenda Setting
6. Community Comment
7. Grid Modernization: The Utility Distribution System as a Platform Technology - Pat Looney, Chair, Sustainable Energy Technologies Department

1. Attendance

Members/Alternates Present: See Attached Sheets.

Others Present: S. Bogart, J. Carter, F. Crescenzo, J. Epstein, P. Genzer, M. Israel, P. Looney, M. Maraviglia, G. Mattson, R. McKay, A. Nunziata, A. Ozelis, A. Rapiejko, J. Remien, N. Sundin, R. Tribble

2. Correspondence and Handouts

Items numbered one and two were mailed to Members with a cover letter dated May 5, 2016. Items numbered three and four were available as handouts at the meeting.

1. Draft agenda for May 12, 2016
2. Draft notes from the April 14, 2016 meeting
3. Copy of Presentation: Environmental Management System – External Audit Results and Future Changes
4. Copy of Presentation: Grid Modernization: The Utility Distribution System as a Platform Technology

3. Administrative Items

The meeting was called to order at 6:31 PM. Reed Hodgins, facilitator, welcomed everyone to the meeting. He reviewed the ground rules and draft agenda and those present introduced themselves.

Member Sprintzen said some time ago, Tom Roser gave a presentation on why nuclear power is essential. He said he would like to hear a discussion on the limits and merits with regard to climate change. He said he thought perhaps the CAC could provide the community with a public forum, perhaps at a local library, where we could discuss all types of energy, including renewables. We could title it, "Our Energy Future".

Member Ziems said he enjoyed last month's presentation on radioisotopes and would like to hear more on that topic.

Hodgin said we can get it on a future agenda.

Member Shea said she would like more information on the counts per minute discussed last month, with regard to overall radiation.

Hodgin asked if she was interested in the health impacts.

Member Doroski said he likes Member Sprintzen's idea and thought perhaps they could include fossil fuels in the discussion.

Member Schuhmann asked if this type of a public forum is something the CAC is allowed to do.

Hodgin said there is a precedent for this. Fifteen years ago there was a forum which was held partially onsite and partially offsite. You would have to first get approval from Lab management.

Member Shea said last time experts were invited to debate each other on the various topics.

Hodgin said this can be a panel discussion that would include comments from audience members.

Member Peskin said it might be a challenge to find appropriate spokespersons for each topic.

Hodgin said the CAC could form a subgroup to work on it. Does anyone think this is not a good idea? Who would be interested in being on the subgroup? Nora, can you take this request back to management for support and then next month, if the answer is yes, we can work on the subcommittee. Interested members include; David Sprintzen, Izzy Doroski, Adrienne Esposito, Mary Joan Shea and Paul Ziems. If anyone else is interested, please let us know next month and you can be included in the subcommittee.

Member Peskin asked what the outcome was the last time this was done. Was a report written?

Member Esposito said we were better educated.

Nora Sundin, Liaison to the CAC, said Member Malloy has brought in a card for everyone to sign for Tom Talbot.

Approval of Minutes

Member Jordan-Sweet said the comment at the bottom of page 2, should say: *In an acute dose, 800 rem would cause death in 50% of the people within 30 days (note: the number posted on web sites ranges from 350 - 500 rem).*

The April notes were approved as amended with seven abstentions.

4. BNL's Environmental Management System – External Audit Results and Future Changes - Deborah Bauer, Environmental Compliance Reprs Group Manager, Environmental Protection Division

Deborah Bauer explained BNL's method for Environmental Management. She said they use the ISO 14001 Standard, which maps out a framework that a company or organization can follow to set up an effective environmental management system (EMS). This helps organizations minimize their environmental footprint, diminish the risk of pollution incidents, provide operational improvements, ensure compliance with relevant environmental legislation and develop their business in a sustainable manner. She said BNL was originally certified as conforming to the ISO14001: 1996 standard in July of 2001, and then certified to the ISO14001: 2004 revised standard in 2005. The Lab has established an ESSH policy, which includes significant environmental aspects, objectives & targets, and action plans. There are work

planning and operational controls in place with a communications plan that includes the CAC. There are internal and external compliance assessment regulatory programs, inspections, and oversight. Corrective and Preventive actions are put in place with assessments and audits. The entire ISO14001 EMS standard has the concept of continual improvement woven into the process; plan, do, check, act, repeat. Planned changes for the ISO14001 standard: 2015 include increased senior leadership involvement, further integration of the planning phase into the organizations overall business strategy, and an increased overall focus on sustainable operations, The previous version focused primarily on current activities, this new version adds risk assessment and lifecycle considerations. The results of the 2016 external assessment covered all organizations with BNL and all areas of the standard. Fifteen positive practices were identified, with two opportunities for improvement. There were no non-conformances related to the EMS. Due to this successful audit, the NSF has recommended BNL be re-certified to the ISO14001 standard.

Member Shea said, you mentioned unbound nanoparticles. What is that and how do you keep track of it?

Bauer said the CFN (Center for Functional Nanomaterials) has been looking at the manipulation of materials at the nano level. Unbound nanomaterials means they can disperse into the air. Smoke from a diesel truck is an example. When materials get to the nano scale, they behave differently. We have controls which keep the materials contained. We can get into the details in another presentation if you would like.

Member Shea said she would like to hear more about it.

Member Bowerman asked for an explanation of a reportable incident.

Bauer said any spill to the soil is reportable. The Lab goes to great lengths to prevent spills from hitting the soil.

Member Bowerman asked if any quantity to the soil is reportable as an ORPS (Occurrence Reporting and Processing System).

Bauer said any time a spill hits the soil; it is reported to the DOE ORPS.

Jason Remien said this also includes releases; even one drop of oil is reportable.

Member Sicignano asked if nanomaterials are harder to dispose of.

Bauer said there are no regulations regarding disposal of nanomaterials. The Lab self regulates. We bring all waste to the Waste Management Facility and treat it as though it is hazardous. We keep it out of the trash.

Member Jordan-Sweet asked if the Lab has a helium recovery system.

Bob Tribble said the RHIC has a closed cycle system. They don't add helium to their inventory. The DOE says we have to recover helium.

Hodgin suggested Bauer come back at another time for a more in depth presentation.

5. Agenda Setting

Nora Sundin said next month, the CAC meeting will be held in the Brookhaven Center, South room, instead of Berkner Hall. We will have some environmental updates and then we will take off for the months of July and August. The CAC subcommittee can meet during the summer to discuss the Energy Forum if the Lab approves the request. The Lab will also be at the Port Jeff

Maker Faire on June 4 if anyone is interested and on June 5 we will be at the World Science Festival in NY City.

6. Community Comment

Hodgin asked for comments from the community. There were none.

7. Grid Modernization: The Utility Distribution System as a Platform Technology - Pat Looney, Chair, Sustainable Energy Technologies Department

Pat Looney spoke to the CAC about the electricity market in NY State, the concept of networked markets and platforms they utilize, and the path forward. He said NYS electricity costs are the highest in the US. He spoke about electricity generation, transmission and distribution. He said coordinated networked and regulated infrastructures are platforms for businesses, services, and markets for many sectors of the economy. There are disruptive trends in the electricity sector which are eroding the natural monopoly of the distribution utility. NYS is creating the "Distribution System platform", which will provide real energy, reactive power, and reserves. These new platforms can bring new levels of value to consumers.

Member Madigan asked if there are models out there using this system

Looney said 2 way power flow is now being used in Hawaii.

Member Pratka asked if he is referring to smart metering.

Looney said yes.

Member Shea asked why the cost of electricity in NY State is so high.

Looney said congestion and antiquated systems along with many other factors contribute to the cost. Every time there is a storm, the repair cost is more than the budget.

Member Ziems asked if NYS will ever eliminate net metering.

Looney said the vision is to get to real time metering for every house. There is a need to change the structure to incentive based.

The meeting adjourned at 9:05 PM.

Next meeting: June 9, 2016.

CAC Agenda Setting – November 12, 2015

TOPICS

Advances in Renewable Energy Technologies – 10

Update on Fukushima – 9

NASA Research – 8

Holographic Principles of Quantum Mechanics – 7

Gamma Forest & Tour – 7

~~Medical Research at BNL – 7 (April 2016)~~

~~DOE Funding & Research Priorities & Impact on BNL – 7~~

Update & Advances on Battery Storage – 6

Discussion of Neutrino Projects at BNL – 6

Global Warming & Sea Level Rise – 6

Nanotechnology Research at BNL – 5

Capturing the COSMOS LSST – 4

Groundwater Monitoring Around New Facilities – 4

Advances in Solar Energy – residential & commercial – 4

Climate Science & White House Report (Steve Schwartz) – 4

Economic Impact of Lab – 3

Peak Oil (peak of World's ability to produce oil) - 3

Non-proliferation – 2

Progress on Strategic Plan Update (Discovery Park) – 1

Long-Term Vision for BNL – 1

More Lab History – 1

Status, Progress, Production Report on LI Solar Array – 1

NSLS-II Research – 1

				Jan	Feb Info session only	Mar	Apr	May	June	July No mtg	Aug No mtg	Sep	Oct	Nov	Dec
P = Present	2015	Affiliation		First Name	Last Name										
		ABCO – Civic (Garber - 04/02) (Bevington – 6/14) (Keenan-10/14)	Member	Ray	Keenan	P		P	P	P					
		(Madigan -10/10)	Alternate	Michael	Madigan	P									
		American Physical Society – Business & Labor	Member	Reinhart	Schuhmann	P		P		P					
		(Schuhmann 1/14, member 9/15)	Alternate	Donavan	Hall				P						
		Brookhaven Coalition of Chambers of Commerce – Bus & Labor (added 6/15)	Member	Ron	Trotta			P		P					
		Brookhaven Retired Employees Association- BNL (Peskin - 09/09)	Member	Arnie	Peskin	P		P		P					
		(Franz - 12/09)	Alternate	Eena-Mai	Franz	P			P						
		(Shapiro-1/13)	Alternate	Steve	Shapiro										
		Citizens Campaign for the Environment – Advocacy & Environment	Member	Adrienne	Esposito	P				P					
			Alternate												
		Colonial Woods Whispering Pines – Civic (Birben - 06/09) (O'Neal 01/15, removed 10/15)	Member												
		(Rehbein -11/10)	Alternate	Eric	Rehbein										
		Coram Civic Association (Ziems - 06/12)	Member	Paul	Ziems	P		P	P	P					
		(Meade – 06/12, Jim M 10/12, Turk 1/16)	Alternate	Rosa	Turk	P		P	P	P					
		East Yaphank Civic Association	Member	Michael	Giacomaro	P			P	P					
		(Feinman - 02/09 – 11/15)(Mack 11/15)	Alternate	Catherine	Mack			P	P	P					
		Emeritus (changed 3/8/12)	Member	Jean	Mannhaupt										
		Foundation for Economic Education – Ed, Sci, & Tech (5/14)(Martin – 10/14)	Member	Bruce	Martin			P	P	P					
		(Edwards – 10/14)	Alternate	Estelle	Edwards										
		(Pratka – 10/14)	Alternate	Craig	Pratka			P	P	P					
		Friends of Brookhaven- BNL (Kaplan 07/01–11/15)(Bowerman 11/15)	Member	Biays	Bowerman	P		P	P	P					
		(Schwartz - 11/02) (Ocko added 11/15)	Alternate	Steve	Schwartz			P							
			Alternate2	Ben	Ocko										
		Huntington Breast Cancer Coalition – Health-Based Rep	Member	Mary Joan	Shea	P			P	P					
			Alternate	Scott	Carlin										
		Individual	Member	Jane	Corrarino	P									
		Individual	Member	Blumer	Karen										
		Individual	Alternate	Michael	Madigan	P		P	P	P					
		L.I. Pine Barrens Society – Advoc & Env	Member	Richard	Amper										
		(Murdocco - 04/11, deleted 6/12) (Muller added – 8/12)(Katie Rose Leonard added – 6/13)(Muether added – 5/15)	Alternate	Katie	Muether			P	P	P					

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P = Present	2015	Affiliation	First Name	Last Name											
		L.I. Progressive Coalition – Advoc & Env	Member	David	Sprintzen	P		P		P					
			Alternate												
		Lake Panamoka Civic Association (Biss - 04/02)	Member	Rita	Biss	P		P	P	P					
		(Grandal - 10/10)	Alternate	Bonita	Grandal	P		P	P	P					
		Longwood Central School Dist. – Ed, Sci, & Tech (Castro -06/09)(Adams 9/15)	Member	Tracy	Adams										
		(Gerstenlauer removed & Sterne added 5/14 removed 9/15)	Alternate												
		Mastic Park Civic Association (Sicignano – 6/12)	Member	John	Sicignano			P		P					
			Alternate	Clara	McManus										
			Alternate	Joe	May										
		Middle Island Civic Association	Member												
		(Nowak 01/15 – 5/15)(Malloy 9/15)	Alternate	Margaret	Malloy			P							
		NLSL-II User Committee – BNL	Member	Jean	Jordan-Sweet	P			P	P					
		(Ravel -02/11-9/15)(Bohon added 11/15)	Alternate	Jen	Bohon			P							
		Ridge Civic Association (Henagan removed 9/15)(Chattaway added 10/15)	Member	Wesley	Chattaway	P		P	P						
		Suffolk County Legislature 1st Dist. - Government (added 6/15)	Member	Al	Krupski			P		P					
			Alternate	John	Stype				P						
		Teachers Federal Credit Union – Bus & Labor (Murdocco 3/15)	Member	Richard	Murdocco										
			Alternate	Suzanne	Gillan				P						
		Town of Brookhaven (Graves –06/06)-(removed 1/2015)	Member												
			Alternate												
		Town of Brookhaven, Senior Citizens Office - Government	Member	James	Heil	P			P						
			Alternate												
		Town of Riverhead - Government (Doroski - 04/11)	Member	Isidore	Doroski	P		P		P					
		(Hulme - 04/11 - 4/14)(Janis Rottkamp 04/16)	Alternate	Janis	Rottkamp				P	P					
		Wading River Civic Association	Member	Helga	Guthy	P		P		P					
			Alternate	Sid	Bail										