

**Community Advisory Council
December 11, 2008
Action Items/Notes**

Final

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. NSLS II, Frank Crescenzo, DOE Federal Project Director
5. Imaging Nanoparticles with Positron Emission Tomography (PET), Wynne Schiffer, Associate Medical Scientist
6. Agenda Setting
7. Community Comment
8. Potential to Reduce Building Heating Energy Use, Tom Butcher, Head, Energy Resources Division

1. Attendance

Members/Alternates Present:
See Attached Sheets.

Others Present:

S. Aronson, D. Bauer, M. Bebon, P. Bond, H. Carrano, J. Carter, J. D'Ascoli, N. Detweiler, S. Dewey, L. Garber, D. Gibbs, M. Holland, S. Johnson, R. McKay, C. Wirick

2. Correspondence and Handouts

Items one through three were mailed with a cover letter dated December 4, 2008. Items four and five were included in the members' folders and items six through eight were available as handouts.

1. December 11 draft agenda
2. Draft notes for November 13, 2008
3. Final notes for October 2, 2008
4. Presentation on National Synchrotron Light Source II Project
5. Presentation on Potential to Reduce Building Heating Energy Use
6. Action Item 01-08 - List of acronyms and their definitions
7. Action Item 02-08 - Hydrograph showing elevations of the water table
8. Speaker fact sheet on Wynne Schiffer and her research

3. Administrative Items

The meeting began at approximately 6:36 p.m. Reed Hodgkin reviewed the ground rules and the draft agenda. Those in attendance introduced themselves.

Dr. Samuel Aronson, BNL Director, gave the CAC an update on the budget. He said there is nothing new to report except that he is optimistic that there will be an FY09 budget in place sometime in January. There is some work going on in stimulus packages. Within the Office of Science, the Labs have put in for some infrastructure projects that are ready for a fairly rapid start and could create construction jobs. The stimulus package plan that went from the Office of Science had a significant amount of money for BNL for the NSLS II project and one of the interdisciplinary science buildings. Right now there is a second round of discussion on more items to put into a larger stimulus package coming from the Office of Science and a list of needed infrastructure projects around the Lab has been assembled.

Member Sprintzen asked if there were any comments on the President-elect's choice for Energy Secretary.

Aronson said that Lab Director, Steven Chu, from Lawrence Berkeley National Laboratory is being appointed by Obama as Energy Secretary. Chu has a great interest in renewable and alternative energy, which is a big part of BNL's strategy going forward.

Member Graves asked about the means of direct input of the stimulus package that the federal facilities are providing. He asked what the pathway was for providing the input.

Aronson responded that the projects are being fed into the Congressional process right now and hopefully will pass on a very short time scale. The request came to the Labs through Congressional contacts. The projects that Congress is interested in are those that will build infrastructure, create construction jobs, and direct the flow into the economy. This is an opportunity for BNL since there are a lot of such projects in the works.

Michael Holland, Manager, Brookhaven Site Office, Department of Energy, gave an update on the DOE contract competition. He said DOE has just started developing a process for solicitation of the contract for management and operation of Brookhaven National Laboratory. There is a website available: <http://rfpbnl.sc.energy.gov/index.html> for more up-to-date information. DOE has put out a request for Expressions of Interest to see who might be interested in submitting a proposal for the Laboratory. Those are due into DOE by the 19th of December.

Member Campbell asked about the procedure for developing the Request for Proposals (RFP). Last time the community was consulted. He asked if it will be done that way this time.

Holland said the RFP is not put together yet so that is difficult to answer. Last time there was a lot of concern about the management of the Laboratory. The previous contractor had been terminated by the Secretary of Energy so there was a lot of input provided from the community and stakeholders. This contract is being solicited after a 10-year period. There is nothing that is driving this other than the commitment to compete the contract after 10 years, so I don't know how open it will be for community input other than through the website, or through me and the CAC. When he has a better understanding of what the process will be, he will update the CAC.

Member Garber asked if the fact that there is currently a search for a new President of Stony Brook University places Brookhaven Science Associates (BSA) at a disadvantage.

Holland did not feel that would place BSA at a disadvantage. He expects that BSA will be submitting an Expression of Interest in the contract.

Aronson said he is on the search committee for the President of Stony Brook and it is not interfering with this process. Stony Brook and Battelle are both going to submit their Expression of Interest to compete for the contract.

Member Guthy asked why there is a need to change the management so often. She wondered if perhaps Battelle didn't want to do it anymore.

Holland said the reason for the change is the commitment DOE made to Congress to compete contracts every 10 years. In the past there were contracts that were held by the same contractor for over 30 years. Congress was upset about that so DOE made a commitment to do business differently. If the performance of the contractor meets certain criteria, that contract could be extended up to 20 years.

Member Chaudhry asked if this call for Expressions of Interest is restricted to certain pre-selected, qualified companies from the past. Would a company that had performed badly be disqualified?

Holland said there are no limitations placed on who could express interest.

Member Kaplan asked if the implication is that BSA did not meet the criteria to get the extension added to their contract.

Holland said no, past contracts did not have the clause in it that allowed the extension. This is new. Several other Laboratories have added the clause when their contract was competed.

Member Giacomaro asked if there are specifications that need to be met.

Holland said, when the RFP goes out a scope of work is provided for all of the bidders so they can understand what DOE is looking for in the contract.

Reed introduced Bob Andrejkovics, a new alternate member for Sarah Anker.

Andrejkovics said he is a fifth grade teacher at Longwood Middle School. He is enjoying being part of the group. He has previously been involved with the Science Learning Center.

Approval of Minutes

Reed asked for corrections, additions, or deletions to the November 13 draft notes. The notes were approved as written with no one opposed and three abstentions.

4. NSLS II, Frank Crescenzo, DOE Federal Project Director

Frank Crescenzo, Federal Project Director, gave the CAC an update on the National Synchrotron Light Source II (NSLS II) Project. He explained that the NSLS II will ultimately replace the current Light Source. In August 2005, DOE determined that there was a need for a new advanced Synchrotron Light Source facility that was capable of one nanometer (NM) spatial resolution and 0.1 milli-electron volt (mEV) energy resolution. This will allow scientists to get beamlines to a resolution of a single atom. It will be the premiere facility of its kind in the world.

In 2007, DOE selected BNL as the site for a new Light Source primarily because of BNL's experience. The Performance Baseline for the project was approved in January 2008. This is a contract between DOE and BSA for what they will deliver, when they will deliver it and how much it will cost. The total project cost is \$912M and should be completed by June 2015. This is the largest capital project in the DOE Office of Science portfolio and will have the capability of 58 beamlines. Once the project is complete, there will be more projects needed to build the beamlines. It is estimated to cost about \$150M a year to operate the facility and it will be considered vital for 25 to 30 years. This is a very substantial commitment and investment to

Brookhaven and is very important for BNL's future. The building will be approximately a half-mile in circumference. There will be a tunnel made of concrete with an electron storage beam inside. Crescenzo explained that when electrons go around and go through a curve, they give off light in a tangential direction. Scientists take that light to beamlines and use it to illuminate whatever it is they are studying. While the facility will ultimately have the capability for 58 beamlines, only six beamlines will be built initially. Probably for another 10 years DOE and other agencies will be building additional beamlines. Comparatively, the NSLS currently has 65 beamlines. There will be three laboratory office buildings constructed to support the Users. There are two more office buildings planned for the future.

Member Giacomaro asked how many people can populate the buildings. He asked if it will be a classroom environment.

Crescenzo said the building will be two stories high and about 25,000 square feet. There will be some laboratories where the scientists can set up their experiments, but mostly there will be office space. There will be approximately 50 offices.

Doon Gibbs, BNL Deputy Director for Science & Technology, said there will be 5 -10 people working per beamline and 10 – 12 beamlines per Office Building.

Crescenzo said there will be about 150 permanent people working for the Light Source and there will be thousands of Users coming in from Universities.

Crescenzo showed the CAC several artists' renderings of the NSLS II, with views of the main entrance, lobby, exterior parking area and an overview of the site plan. He said it will be architecturally complimentary to the Center for Nanomaterials. The Lab has been designing and planning this facility for three or four years. The design has been reviewed extensively by the Department of Energy. This past Tuesday, a meeting with the Deputy Secretary took place and right now the Lab is waiting for formal approval to begin construction. Early site preparation is already underway. The proposals for the ring building, which is the single biggest cost of the project at about \$200M, are now under review. Brookhaven expects to award a contract and break ground in early spring. Later in the summer of 2009, the Lab will begin to procure the major components for the storage ring, which consists of about 340 magnets.

Member Chaudhry said it appears that the NSLS II project is on track. Construction was estimated at five years, so that would mean completion in 2013. However, you stated a completion date of 2015.

Crescenzo said there is 18 months of scheduled contingency for this project in case something comes up. With the current schedule, completion is planned for 2014, but it is not required by DOE until the year after.

Member Kaplan asked if the existing NSLS will be taken down.

Crescenzo said it will eventually stop operating as a Light Source. The current plan is to use it as a control room for the NSLS II. There will be a carefully planned transition. The current employees will have job opportunities at the new NSLS II. There are no plans to take down the building. It will not be used as an operating facility, but there is a plan to remove the components from NSLS I.

Member Kaplan asked how is it possible to move a synchrotron.

Crescenzo said that it would be taken apart.

Member Guthy asked what will happen if the project gets started and then there is a money problem. Is this \$950M already committed to BNL?

Crescenzo said the federal government only commits money once a year. This project could be cancelled at any time, just like all projects. However, there is tremendous support from the community, Congress, and DOE for it.

Member Garber asked if this is a green or LEEDS specified building.

Crescenzo said it is being designed to achieve a LEEDS silver certification.

Member Graves asked if there is any information regarding the Request for Proposals that was due in October. He asked how many proposals were received and where the organizations were located.

Crescenzo said there was a very competitive response. It appears to be affordable. There was global response, as well as response from companies located on Long Island.

Member Kaplan asked if the contract for the NSLS II project was a fixed fee and if there are any potential show stoppers.

Crescenzo said the technical risk for the project is minimal. The contract for the ring building is a lump sum contract. There should be no additional fees. In addition to that one contract, there will be hundreds of other procurements.

Member Sprintzen asked how the new NSLS II will compare to the current Light Source in terms of developing capabilities and the additional beamlines will be built. What is the current resolution?

Crescenzo explained how a Light Source operates and said there are 58 ports for the beamlines to come off. Initially, there will be six at the start of the project. Some will come over from the original Light Source. DOE will build others as separate projects. Beamlines cost about \$10M.

Doon Gibbs said the new machine will allow things to be imaged at a nanometer resolution. The nearest competitor is about 40 or 50 nanometers, so this will be at least 50 times better than that.

Member Guthy asked if the Users pay to use the facility and if so, how much. She asked if everyone pays the same amount or if it depends on some criteria.

Crescenzo said they only pay if they want to do proprietary research and make money from it. Users don't pay if they publish their research.

5. Imaging Nanoparticles with Positron Emission Tomography (PET), Wynne Schiffer, Ph.D., Associate Medical Scientist

Dr. Schiffer, Associate Scientist, Medical Department, thanked the CAC for inviting her to speak to them. She described what Positron Emission Tomography (PET) is and showed pictures of early PET machines. Schiffer explained radiochemistry and the basics of PET chemistry. She described how compounds like glucose are labeled with positron emitting tracers and how the scanner records signals as the tracers travel through the body and accumulate in different organs.

Dr. Schiffer explained what the microPET was and her research using it – biological interactions of nanoparticles. She showed the CAC actual images tracking the movement of nanoparticles in her subjects. She discussed developing kinetic models to describe and predict nanoparticle behavior in living systems. She also discussed the fate of the nanoparticles and showed their uptake in organs such as the brain and kidneys and discussed findings on different size nanoparticles. She explained the conclusion of her research which is that PET imaging with radiolabeled particles can be used to identify the rate at which particles accumulate in a given tissue. The information can then be used to guide later analysis of tissues from the same subject and then fed back into the kinetic model.

Member Henagan asked if she knows whether or not these particles are crossing the blood brain barrier, or is it just getting caught up in the capillary endings.

Schiffer said they don't know yet. They are looking at the tissue to find out exactly where those particles are. There is a lot of information to synthesize.

Member Garber said that in the two slides showing the flow of nanomaterials into the brain, it appeared that they both entered the brain equally, but the larger particles got swept out very quickly. It gives the illusion that they are not entering the brain because they are swept out so quickly. That appears inconsistent with a lot of literature.

Member Henagan said that is similar to his question whether or not they are actually crossing the blood brain barrier or just entering the capillaries.

Schiffer said that it is being delivered to the head but we don't know if they are crossing the blood brain barrier. They don't appear to stick in there.

Member Giacomaro asked if Schiffer's research is coordinated with the new facilities at the Lab.

Schiffer said her work began before CFN was constructed, but now she plans on working there more. However, because the isotopes are so short-lived, they need to be near the PET camera.

Member Jordan-Sweet asked if it is necessary to always coat the particle being looked at during nanoparticle preparation.

Schiffer said advances in the surface chemistry of nanoparticles have enabled PET in labeling. Most nanoparticles come with carboxyl end groups which are very easily to label, but there are still a lot of nanoparticles and carbon nanotubes that are not easy to label. At BNL, we have the ability to put them in front of a particle beam and irradiate them.

Member Jordan-Sweet asked how well matched the model nanoparticles are to what is used in industrial synthesis.

Schiffer said that if you were to buy them now, they all have carboxyl end groups.

Member Graves asked if it would make a difference if you were to deliver the tracers through the lungs or skin instead of the bloodstream.

Schiffer said it would make a difference. When they are delivered through the bloodstream, they are kept in a solution. Battelle is interested in studying inhalation through the environment and is funding some research in Europe.

Member Kaplan asked Dr. Schiffer about her funding source.

Schiffer said that most of her funding comes from Battelle. She has applied to NIH three times. She applied to the National Institute of Environmental Health Sciences (NIEHS) and to the National Institute for Biomedical Imaging and Bioengineering (NIBIB) but they both said to send the request to the other.

The CAC discussed the funding situation and noted it was similar to the funding issues encountered with Dr. Dewey's addiction research.

Member Henagan asked if she had applied to EPA.

Schiffer said because BNL is DOE-funded she cannot apply to EPA or NSF. She said there is a dilemma within the federal agencies over who is responsible for funding medical imaging research.

Member Sprintzen asked for a copy of Schiffer's presentation (copies were not available because the presentation was not received prior to the meeting).

ACTION ITEM: Provide CAC members with copies of the Nanoparticle Imaging with PET presentation.

6. Agenda Setting

Jeanne D'Ascoli told the CAC there will be an update on the HFBR and BGRR at the January meeting. There will also be an update on the pump house explosion as soon as the report is finalized, hopefully in January too. She said she would like to do some brainstorming regarding membership and ways to bring in new members. She said that anyone who expressed an interest in being a member could attend a few meetings and explain why they were interested in being a part of the CAC. She said she would like to discuss it more next month and asked if the CAC was agreeable to that. No one indicated that they were not agreeable.

Member Amper said that about nine years the CAC created a subcommittee for accelerated cleanup, which dealt principally with obtaining funding from Washington. He asked if it was possible to go back some 10 years later and take a look at what we thought we could do and see what progress was made. Did we get all the money we were promised and if we did, is it taking us longer than we thought? I think it's a challenging thing, but I think it would be useful, especially for many who have been here for a long time to look back and say, did it count, did it make a difference, did it work out the way we thought? If there is a capacity to do that, I think everybody would benefit from this.

Member Garber said, following along, if we did a similar exercise in light that there may be money to be pumped into the economy, this might be an appropriate time to get some extra money to do cleanup because there are jobs in cleanup. As well as accelerating construction.

Aronson said he would take this as a commitment on the part of the Lab to look at it and come back with some idea of what kind of work is involved. He said he understood the purpose of the question but wants to find out what it would take to actually produce meaningful results. He did not want to commit to a particular meeting in the next couple of meetings where the Lab would have answers; he would prefer to look into the scope of the work needed to provide the information first.

Reed said the commitment is to examine what it is we are talking about doing and what it will take to do that and bring that back.

ACTION ITEM: Review scope of work necessary to provide a report on the cleanup results from the funding for accelerated cleanup.

Amper said, it is not by way of trying to second guess what has happened since, but it may suggest things that still need to be done that we did not anticipate or that we thought we had accomplished and indeed we didn't or that the times have changed or the complication involved in the cleanup was greater than we thought. I just think it will educate us in terms of where we are going, not so much where we have been.

Reed said that the information on the two action items from last months' meeting, a list of acronyms and background information on the high water table in 2006, is available on the table as handouts.

7. Community Comment

There was no community comment.

8. Potential to Reduce Building Heating Energy Use, Tom Butcher, Head, Energy Resources Division

Tom Butcher gave the CAC an overview of energy efficiency programs. He went over the short and long term heating system options and explained what to do if you have a very old inefficient system and want to replace it. Many people are looking for a tool to see what the energy saving implications are, particularly in regard to advanced controls and configurations. He said that there is a way to do a performance map on a system. He explained the output-input curve, which is how much energy you get out for how much energy you put in depending on the type of load. The two important factors are idle loss, and steady state thermal efficiency. He showed the CAC a summary of the test results indicating steady state thermal efficiency, combustion efficiency, idle loss, and summer domestic hot water efficiency for different types of oil burners. He explained that the results show a range from 72.8% - 93.6% thermal efficiency and 0.15% to 4.9% idle loss. These results are used to calculate the amount of fuel these systems will use. This information has been converted into an online tool, an FSA calculator (Fuel Saving Analysis). It can be downloaded and it is possible to predict how much fuel you would use in your structure for that year. You can also look at upgrade options, view the economic results and see how much energy you would save. This has been very effective in showing that the savings potential is higher than thought. Butcher then showed several results for the Long Island area.

Member Giacomaro asked what thermal efficiency means and how idle loss is measured.

Butcher explained that it is full load, steady state, how much fuel goes in and how much energy goes out. Idle loss is the percentage of oil that is used just to maintain the system without running anything. The lowest idle loss is in a fully condensing system. A condensing system is so efficient that it reduces the exhaust gas temperature so much that it reaches dew point and starts to condensate. Field studies have been done to verify these results. There is more energy that can be saved by replacing an old system with a new one than standard labeling procedures would indicate. It is important to pay attention to idle loss.

Member Giacomaro asked if this is just for heating systems.

Butcher said yes. A lot of people cannot afford to replace their systems so we have focused on some areas of possible improvement for existing tankless coil boilers, which are traditionally the cheapest systems and are the worst performers.

Butcher explained a solar demonstration project that the Lab is currently installing at the Brookhaven Center. A combi-system will combine a biodiesel-fired, condensing boiler with solar panels to provide heat and hot water. The efficiency should be in the 93 – 96% range. Hopefully this type of system can be modeled in a residential setting.

Butcher said that the wood option is generally not a good one because of the particulate emissions. Another option is the microCHP, which refers to heating systems that also produce electric power. There is a huge amount of interest in this worldwide as the next step beyond solar or thermal. The energy savings is around 20%, which is quite substantial. (CHP stands for combined heat power.)

BNL is currently involved in a thermophotovoltaic (TPV) power generation project. Butcher described the HCCI (homogeneous charge compression ignition) microCHP Engine Project. He explained that fuel-fired heat pumps hold great potential for the future and said that BNL is working on the development of an oil- and biodiesel-fired generator. Currently, they are running at 120% efficiency, but they are not as efficient in cooling as they are for heating use.

Member Henagan asked if it is possible to use ground-loop to increase the cooling efficiency.

Butcher said it would be good, but the cost is high.

Some of the other energy efficiency projects that the Lab is working on are new test standards for water heater efficiency and field studies, a Water Heater Field Study, low cost distribution for condensing boilers, a field study of advanced controls for tankless coil boilers, and corrosion in high efficiency, condensing, biodiesel-fired boilers. Butcher said that about 25% of new gas-fired boilers are condensing.

Member Carlin said that when he had to replace his boiler, his oil company wanted to replace it with the same type of boiler. He said the information on efficiency needs to get out to the public.

Butcher said that BNL did a press release and he has gone to many conferences to get the word out. It has been suggested that there be a live webinar.

The CAC had a discussion on how to get the word out about the findings from Butcher's research. Using the web and attending home building trade shows were suggested.

Member Graves asked if the heat pump is available now and where the U.S. is in comparison with the rest of world on this issue.

Butcher said there are some heat pumps available, but not the high performance ones. Europe uses a lot more solar energy because of the government incentives that are available there.

Member Kaplan asked if there has been any research on computerized controls for existing home heating systems.

Butcher said yes, that area is about to blossom. The savings potential is amazing.

The meeting adjourned at 9:25 p.m.

Agenda Topics	Votes
Global Warming, Stony Brook, Pine Barrens (1-10-08)	15
CAC as a conduit/resource to the community (11-08-07)	13
Emergency Operations Center tour and drill (6-12-08)	12
Nano technology	11
CERN—problems and implications (4-10-08)	11
Site Environment Report—good and bad (11-8-07) (10-2-08)	11
Nano safety (3-13-08)	10
Regulator presentations on areas they oversee	10
Energy	9
Overview of programs	9
Deer Management (4-10-08)	8
Anti-terrorism update	7
NLS-II briefing	7
Nuclear power plant safety	6
Education Programs (10-2-08)	6
Energy efficiencies (9-13-07)	6
Sustainable transportation	4
Natural Resources management (11-13-08)	4
Nano ES & H (10-11-07)	3
Safety and Security	3
Experimental Review Process	3
Latest RHIC findings	2
How the Lab supports nuclear facilities in the N/E region	2
Status of P-2 road show	2
Heating plant and efficiency research (12/11/08)	2
Lyme Disease	2
CAC process	2
Alternative fuels	2
Update on phyto/bacterial contamination remediation research	1
Deforestation	0
Work planning process	0

New Topics Added After September 2007 Vote

~~Global warming—BNL research (5-8-08)~~
 Nano toxicology
~~Nano ES&H issues at BNL and beyond (5-8-08)~~
 Nanotechnology/science at BNL
 Nano management policy issues
 Nano panel discussion with the DOE, EPA, and FDA
 Renewable energy research at the Lab
 BNL/CSHarbor/Stony Brook collaboration

P = Present	2008	Affiliation		First Name	Last Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
ABCO	(Garber added on 4/10/02)	Member	Don	Garber	P	P	P	P	P	P					P	P	P
ABCO		Alternate															
Brookhaven Retired Employees Association		Member	Graham	Campbell	P	P	P	P	P						P	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							
(AnnMarie Reed)(12/08-BobAndrejkovics)			Bob	Andrejkovics													P
Citizens Campaign for the Environment		Member	Adrienne	Esposito	P	P	P			P					P	P	
Citizens Campaign for the Environment (Ottney added 4/02-takenoff 1/05 Mahoney put on)(7/06 add Kasey Jacobs)(K. Jacobs off 1/08)		Alternate															
E. Yaphank Civic Association		Member	Michael	Giacomaro	P	P	P			P	P					P	P
E. Yaphank Civic Association (J. Minasi new alternate as of 3/99) (M. Triber 11/05) (Munson 6/06)		Alternate	Brian	Munson													
Educator (changed 7/2006)		Member	Adam	Martin													
Educator (B. Martin - 9/01)		Alternate	Bruce	Martin			P			P					P	P	
Educator (A. Martin new alternate 2/00) (Adam to college 8/01)(add. alternate 9/02) (changed 7/2006)		Alternate	Audrey	Capozzi													
Environmental Economic Roundtable (Berger resigned, Proios became member 1/01)(Proios retired 6/08)		Member	George	Proios	P				P	P	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	Don	Lynch	P	P				P					P	P	P
Fire Rescue and Emergency Services		Alternate	James	McLoughlin			P										
Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)		Member	Ed	Kaplan		P	P										P
Friends of Brookhaven (E.Kaplan changed to become member 7/1/01)(Schwartz added 11/18/02)		Alternate	Steve	Schwartz	P	P				P	P						
Health Care		Member	Jane	Corrarino		P									P		
Health Care		Alternate															
Huntington Breast Cancer Coalition		Member	Mary Joan	Shea		P	P	P	P	P							
Huntington Breast Cancer Coalition		Alternate	Scott	Carlin												P	P

Intl. Brotherhood of Electrical Workers/Local 2230 (S.Krsnak replaced M. Walker 1/11/07)	Member	Scott	Krsnak	P	P		P	P	P					P	
IBEW/Local 2230	Alternate	Philip	Pizzo												
L.I. Pine Barrens Society	Member	Richard	Amper		P	P							P		P
L.I. Pine Barrens Society (added P. Loris 6/05)(Alayeva off 6/08)	Alternate			P					P						
L.I. Pine Barrens Society	Alternate	Susie	Husted												
L.I. Progressive Coalition	Member	David	Sprintzen	P	P	P	P	P	P				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	P	P	P				P	P	
Lake Panamoka Civic Association (Rita Biss new alternate as of 3/99)	Alternate	Joe	Gibbons												
Long Island Association (Groneman replace 10/05)	Member														
Long Island Association	Alternate	William	Evanzia				P						P		
Longwood Alliance	Member	Tom	Talbot	P	P			P	P				P		
Longwood Alliance	Alternate	Kevin	Crowley												
Longwood Central School Dist. (switched 11/02)	Member	Barbara	Henigin	P		P		P	P				P	P	
Longwood Central School Dist.	Alternate	Allan	Gerstenlauer												
NEAR	Member	Jean	Mannhaupt				P	P	P				P		
NEAR (prospect taken off ¾) (Blumer added 10/04)	Alternate	Karen	Blumer	P									P		
NSLS User	Member	Jean	Jordan-Sweet	P		P	P		P						P
NSLS User	Alternate	Peter	Stephens												
Peconic River Sportsman's Club (added 4/8/04)	Member	John	Hall	P					P				P		
Peconic River Sportsman's Club	Alternate	Jeff	Schneider				P								
Ridge Civic Association	Member	Pat	Henagan	P		P	P	P	P					P	P
Science & Technology (added 1/13/05)	Member	Iqbal	Chaudhry	P	P	P	P	P	P				P	P	P
Town of Brookhaven (Graves made member 6/06)	Member	Anthony	Graves	P		P	P	P	P				P	P	P
Town of Brookhaven	Alternate	None	None												
Town of Brookhaven, Senior Citizens	Member	James	Heil	P		P	P		P				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	P	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		P	P	P				P		P
Wading River Civic Association	Alternate	Sid	Bail												