



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION
100 CAMBRIDGE STREET, BOSTON MA 02114

Meeting Minutes for August 21, 2008

Minutes approved May 14, 2009

Members in Attendance:

Kathleen Baskin	Designee, Executive Office of Energy and Environmental Affairs
Marilyn Contreas	Designee, Department of Housing and Community Development
Jonathan Yeo	Designee, Department of Conservation and Recreation
Duane LeVangie	Designee, Department of Environmental Protection
Gerard Kennedy	Designee, Department of Agricultural Resources
Joan Kimball	Designee, Department of Fish and Game
John Lebeaux	Public Member
David Rich	Public Member
Bob Zimmerman	Public Member

Others in Attendance:

Michele Drury	DCR	Jennifer Pederson	Massachusetts Water Works Assn.
Linda Hutchins	DCR	Butch Seidel	Holyoke Water Works
Bruce Hansen	DCR	David Conti	Holyoke Water Works
Tom Flannery	DCR	Tracy Adamski	Tighe & Bond
Erin Graham	DCR	Mark Kalpin	Wilmer Hale
Marilyn McCrory	DCR	Matt Palmer	EMI/Pioneer Valley Energy Center
Anne Monnelly	DCR	Mitchell Jacobs	Pioneer Valley Energy Center
Frank Hartig	DCR		
Margaret Callanan	EEA		

Agenda Item #1: Executive Director's Report

Bruce Hansen provided an update on the hydrologic conditions for July: Rainfall across the state was above normal ranging from 148% above normal in the Western Region to 200% above normal in the Connecticut Region. Overall the state was 178% above normal making this the 5th wettest July on record in the past 115 years. Most of the rainfall occurred in the second half of the month. August has continued to be above normal. Already 2"-6" of rain has fallen, assuring that statewide rainfall in August will be above normal as well. Groundwater levels are mostly above level or normal and streamflows are mostly above normal. The Water Supply Reservoir Levels are very full, ranging from 75%-98%, and the operators consider these levels above normal for this time of year. All the drought indicators for Massachusetts are for wet conditions. These conditions will continue into the immediate future, probably into November.

Anne Monnelly gave an update of yesterday's conference call with the State Mosquito Board regarding health issues. She advised the WRC that there are still some areas of Massachusetts that are at high risk for West Nile Virus. People think there is no longer a risk once the nights start to get cooler, but the temperature needs to get down to freezing before the mosquitoes stop activity. For more information, she referred people to websites from the Department of Agricultural Resources and the Department of Public Health.

Michele Drury gave an update on Water Needs Forecasts for the Charles and Blackstone basins. There will be informational meetings held jointly with DEP to present an overview of the permitting process and the water needs forecast process. The Charles River basin meeting will be held September 9th at Elm Bank in Wellesley and the Blackstone basin meeting will be held September 10th at the River Bend Visitor's Center in Uxbridge. Some draft projections have been sent to communities in the Blackstone basin. A few communities will be receiving interim projections, in accordance with Water Needs Forecasting Policy, because the data were not of an appropriate caliber. DCR staff will be working with DEP on the permitting to obtain data needed. Communities may still provide information in this process.

Agenda Item #2: Presentation: Pioneer Valley Energy Center, Request for Determination of Applicability

Michele Drury gave a presentation on the Request for Determination of Applicability for the Pioneer Valley Energy Center (PVEC). The purpose of the presentation was to discuss research as to whether the Interbasin Transfer Act applies to the project. She distributed the staff summary, a response to staff questions by the PVEC proponent, and comments received to date, and then provided some background on the project. The project involves transferring raw water from the Holyoke System in the Connecticut River Basin to the proposed power plant in Westfield in the Westfield River Basin. The Holyoke supply is from the Tighe Carmody Reservoir which originally transferred to the Ashley Reservoir. There are two water lines with a capacity of 6 MGD. One pipeline will be used unless a back up is needed. Most likely there will only be one pipe, but Matt Palmer, project manager for the PVEC, stated they may need to line the other pipe as well. Lining will reduce the capacity of the pipeline from 6 MGD to 2.2 MGD. These pipelines will only be used to serve PVEC.

In order to determine whether the Interbasin Transfer Act (ITA) applies, Drury explained that staff has reviewed information including Special Acts of 1898 Chapter 482 Section 6. The Special Acts allow the City of Holyoke to supply water from the Tighe Carmody Reservoir to persons and corporations owning or occupying land in Town of Westfield within 1,200 feet of the pipeline. The parcel where the power plant will be located is outside the 1,200 ft, but PVEC is purchasing land to meet this criterion.

Drury described the Commission policy set forth in the Guide to Application of the Interbasin Transfer Act and Regulations that states that expansion within an existing water supply or wastewater system originally designed and constructed to accommodate larger flows than currently being experienced and enlargement of the receiving area that does not increase the existing hydraulic capacity to transfer water out of basin are exempt from review under the ITA.

Drury also said that staff reviewed precedents set by past projects. These included:

- MDC sewer project in West Boylston involving construction of new sewer connections where the areas proposed for sewerage had been included in the original Sewer Facilities Plan for the system which preceded the Interbasin Transfer Act,
- Sithe Energy (November 1999) transfer of water from the MWRA to the City of Quincy,
- Town of Wilmington sewerage project (1999),
- Dedham-Westwood Water District's request to join the MWRA water supply system (2003), and
- YMCA of the North Shore in Salem purchase of water from the MWRA via the Marblehead system (2006).

Drury explained that staff had reviewed all this information and came to the conclusion that the PVEC proposal is similar to these cases and this can be viewed as an expansion within an existing system- the Holyoke Water Supply System, which was originally designed and constructed to accommodate larger flows. Although there will be a service line to the PVEC site, this will not increase the capacity of the existing pipeline that facilitates the transfer. Right now, the site is outside the 1,200 feet and doesn't meet the conditions established by the Special Acts of 1898, but PVEC is in the process of purchasing land. If they are able to own and occupy land within 1,200 feet as required by the Special Acts of 1898, the project would be similar to Dedham-Westwood. There are additional conditions in the Special Acts of 1898 that require both the Holyoke Water Supply Commission and the Westfield Water Commission to approve the transfer. If they are able meet the conditions of Special Acts of 1898, then the Commission should conclude that the ITA does not apply to this project.

Kathleen Baskin summarized the proposed project because not everyone had a chance to read the documents. The project will use 2 MGD to cool a proposed power plant.

Bob Zimmerman asked if it is once through cooling. Matt Palmer answered it is cooling tower that evaporates so it is once through cooling and therefore there is not a discharge of heated water to a water body.

Zimmerman asked if there was a reason why the secretary asked that air not be considered the only option. Baskin answered that the proponents proposed air cooling in the original ENF filed with MEPA. Her understanding was that MEPA, in order to have a full range of alternatives for the EIR, directed the proponents to consider water cooling in the certificate as one of the alternatives that the secretary asked for. Baskin said that they all recognize that the evaporation of 2 MGD of water evaporated is a lot, but said the focus of the discussion should be on determining whether the project is applicable under the ITA.

Baskin went over key aspects of the project- the pipeline was built before the ITA was passed and has the capacity to move 6 MGD of water. There is an existing system, under the ITA, and the Commission needs to determine if there is an increase in the present rate of transfer. One question is- is the capacity increasing? No, the capacity is decreasing because the pipe is being lined. Another question is- is there a change in operating rules? Normally, in a case like this, the answer would be yes, but because there is a specified user area in the Special Acts of 1898, there isn't a change. The Special Acts say that the City of Holyoke, by its Water Commissioners, may

also supply water from sources aforesaid for fire, domestic, and other purposes, to persons and corporations owning and occupying lands in the Town of Westfield within 1,200 feet of the pipeline conducting said water supply. The plant is 0.5 mile as the crow flies from the pipeline, but the project proponents will be establishing rights to own or occupy lands within 1,200 feet of the pipeline to establish that their project is within the service area as defined by the Acts of 1898. Staff didn't think there was a change in operating rules. Baskin stated she is interested to hear comments from the Commission on all staff's preliminary conclusions. That is why there was a staff summary prepared for today's meeting. A staff recommendation will be prepared for the next meeting. Based on staff's research on whether there is an increase and what precedents exist, staff does not think that the project is subject to the ITA. However, Baskin recognized is this a large amount of water and that normally a 1 MGD transfer triggers the ITA.

Joan Kimball is concerned when large amounts of water are taken from rivers. She asked a legal question- in the papers that she received, PVEC legal staff wrote that discontinuance for 10-years did not null and void the grandfathering. Why did discontinuance for 10-years not change the grandfathering? Mark Kaplin, the lawyer for PVEC, offered his opinion that the right was grandfathered regardless of whether the water was used or not. Similar to the precedents of expansion within existing systems, the capacity is there, but it just isn't being used. As long as there is nothing done beyond preventative maintenance, the system maintains its grandfathered status. Kimball asked whether that was also the understanding of the staff; Drury answered yes.

Baskin summarized two comment letters. One letter from Parker & Grady representing Southampton expressed concern about lack of ownership and number of other arguments that weren't elaborated. Baskin received a memo today from Eileen Simonson who asked questions about what constitutes PVEC's right under the Special Acts of 1898 and the ITA. Kathy Baskin furthered relayed that she heard verbally from the Connecticut River Watershed Council. All three parties are not happy with the project.

Kimball said that she has heard from concerned parties who feel the project requires a lot of water (2 MGD). There is also a concern about the precedent and not sending a message to industry that the state looks favorably on these types of water withdrawals, especially when streams are starved.

Drury stated that the draft EIR, which was submitted last Friday, would be a very good place for people to express their concerns and for these issues to be furthered explored. Baskin mentioned there is also the Energy Facilities Siting Board process. Zimmerman asked about intervening through the Energy Facilities Siting Board process and Palmer answered that the intervention period closed last week.

Jonathan Yeo asked questions about the reservoir system. Drury, along with David Conti of the Holyoke Water Works, elaborated that there is a registration for total of 8 MGD from that basin. The reservoir is used as the primary reservoir, but the pipeline has not been used since 1997. There is a 42" transmission main to the treatment plant and then the water flows into the distribution system. Holyoke has the ability to discharge into two in-town reservoirs. The two lower reservoirs, which were originally distribution reservoirs, are on standby status.

Yeo asked questions about the City's demand to get a sense of what buffer exists. Conti answered that the city's demand is 6 MGD. There is a registration for 8 MGD in that basin, but they have sources registered in other basins. Yeo asked if it would be 2 MGD every day, or will it vary? Palmer answered 2 MGD is the maximum and would vary seasonally, so that on average the demand would be 1.7- 1.75 MGD.

Kimball added that power plant operation would be mostly in the summer when the needs of the stream are the greatest. She wanted to know if water spilled from the dam or if there were any releases. Conti said there were never any measurements, but typically water spills for seven months, but not during the summer. Kimball was concerned that the 2 MGD withdrawal may extend the period of no release.

Zimmerman asked why the water demand varied from 1.7 MGD to 2 MGD. Palmer said they applied for 2 MGD because that was a conservative high-end estimate. Zimmerman asked what the difference in water use is between evaporative cooling and air cooling. Palmer answered the difference is significant, the water consumption drops dramatically.

Zimmerman asked what the order of magnitude is of water consumption of the proposed plant compared to that at an air cooled plant. Palmer confirmed that the plant as proposed would consume 2 MGD and that an air cooled plant would consume 250,000 gpd. Palmer further explained that the advantages of going to water cooling are significant- it reduces the footprint of the site, reduces the fuel consumption, increases the efficiency, reduces the emissions, and reduces carbon dioxide. Zimmerman made the point that essentially there is borrowing against one resource to save the other and Palmer responded that is correct. Zimmerman asked for confirmation that by evaporating 2 MGD of water, the project would reduce consumption of natural gas by 2%. Palmer confirmed that it was 2% and also pointed out that an increase in the capital return by decreasing the capital costs makes greater revenue available for local ratepayers and taxpayers. Zimmerman reiterated that a 10-fold increase in consumption (water) would save only 2% on another resource (natural gas). Yeo clarified that of the 1.7 MGD, 150,000 gpd is blow down to Westfield, with a total evaporated of 1.55 MGD. With air cooled it is 250,000 gpd. Zimmerman corrected himself that it is a 7-fold increase. Palmer said that MEPA and Siting Board are looking at the totality of the project.

Drury reminded the Commission that the crux of the matter is coming into compliance with the Special Acts of 1898. She asked Palmer to show the site on the map and tell the Commission the status of the land owners.

Palmer used a map to show the locations of the facilities and the land parcels to be purchased in fee simple in order for PVEC to own 120,000 ft² of land within 1,200 feet of the pipeline. There will be three acres of land that PVEC will both own and occupy and there will be a 12" pipe running down the entire corridor. PVEC will own three acres and in another area it will have an easement to occupy the land. That area is held by the railroad, which was not comfortable selling. The three acres to be purchased is part of an industrial park and he is confident that deal can be completed. Palmer reiterated that PVEC will own and occupy, not just own or occupy three acres within the 1,200 ft limit. All transactions will be completed before the project begins.

Zimmerman asked questions about the response to Parker and Grady letter that suggests the 1,200 ft is it more like 2,300 ft, and questions whether the project is grandfathered. Have any judges ruled on this matter? Drury answered that no judges have ruled yet, and that the Commission's rulings have not been challenged. The Commission has, in the past, talked about the project as proposed. If the Commission makes a decision, the Commission could put caveats in the decision.

Baskin asked some questions raised by Ms. Simonson in her letter, which deal with the occupancy of the land with respect to easements. Kalpin gave his interpretation: The issue is an easement enough to satisfy the requirement of the Special Acts of 1898 which states that to receive water from the pipeline, an entity must own or occupy land within 1,200 ft of that pipeline. There is no specification as to where the water is to be used. That is not part of the test, the test is do you own or occupy land. PVEC will do both own and occupy physically with a valve house and a transfer pipeline from the Holyoke water line to the actual power plant itself. That will satisfy both standards of the test.

Baskin asked how the parcel where the easement is to be acquired will fulfill the requirements. Kalpin answered the way the project is designated and has been developed includes all the facilities associated with the power plant, including the piece that extends to Holyoke's water line, so the project site itself is located within the required 1,200 feet; the project includes all the facilities associated with the power plant, including the water line. Kalpin stated that there will be three acres of property within 1,200 ft that PVEC will both own and occupy and therefore, they firmly fall within the requirements of the Special Acts of 1898. .

Kimball stated that in the Special Acts of 1898 there must agreement between certain towns and asked about the standing of Southampton. Kalpin answered that the Act requires that there must be agreement of the Water Commissioners of two jurisdictions- Holyoke and Westfield. Southampton is not mentioned in the Act.

Duane LeVangie stated that the information provided includes a Safe Yield, which DEP has not approved. He asked Holyoke if this project will put the City in a position of needing a WMA Permit. He asked whether Holyoke has a contingency stating that the project will not get that volume if the Firm Yield comes back less than it is suggested to be and whether there are any expectations that Holyoke will do a Firm Yield to as part of an application to commit to this water. A representative from Holyoke responded that the reservoir yield is 13 MGD, but the Registration for the reservoir is 8 MGD. There has been a continuing declining demand numbers and the demand is just less than 6 MGD. As far as study is concerned, that has been discussed, but not done. Baskin asked for clarification regarding registration and permits and Holyoke said there is a Registration for 8 MGD. Kathy Baskin confirmed with Holyoke their understanding that if their demand goes above 8 MGD, there will be additional municipal requirements associated with a permit. A representative from Holyoke answered that they understand, but usage has continued to decline. Zimmerman asked what the current water demand, as measured in residential gallons per capita per day of water consumed (rgpcd), is and a representative from Holyoke responded below 60 rgpcd. Yeo asked for clarification on the total registration for the town, which a representative from Holyoke confirmed was 9 MGD.

John LeBeaux asked if the only issue before the WRC is the Determination of Applicability. Baskin confirmed that is the only issue. The WRC may have an opinion about the project, but all the WRC has been asked to do is determine whether the ITA applies. The WRC will make that decision next month and today is just information gathering.

David Rich asked if the easement that PVEC intends to occupy will be an easement in perpetuity. Palmer responded that it will be in perpetuity. Rich stated he would like to see all this information be reviewed by WRC legal counsel before the WRC makes a decision. Drury answered that staff has been in contact with the legal counsel and that they helped write the staff opinion. Rich stated that he would prefer that legal counsel review all information, including that received yesterday and today, and they concur with the staff. Legal staff agreed to do that.

Baskin said in terms of interpretation of the requirement to own or occupy within 1,200 feet of the pipeline, this is also a Holyoke issue. She asked Holyoke if it has determined how it would interpret this requirement. A representative from Holyoke responded that they haven't reviewed it.

Drury reminded the Commission that because this is a formal Request for Determination of Applicability, the regulatory clock is ticking. There needs to be a decision by September 28th so staff will be asking for a vote at the September 11th meeting.

Baskin reminded the Commission that any additional information should be received soon so that the Commission and staff will have time to review before the next meeting.

Zimmerman stated for the record that he would like to see a justification be provided for a 750% increase in water use for a 2% decrease in natural gas. Palmer responded that it was outside the scope of the ITA. Drury suggested that any comments out side scope of the ITA be submitted to MEPA and urged the Commission to get a copy of the DEIR, which is available through MEPA. The Commission could ask for a justification, but what would they do with it? Baskin said for the purposes of the WRC decision, the focus is very narrow; however, there is a DEIR and people should also be commenting on that. Palmer said the DEIR is available on their website www.pvenergywebsite.com.

Agenda Item #3: MA Lakes and Ponds Program Update, Tom Flannery, DCR

Tom Flannery, Aquatic Ecologist, of DCR's Lakes and Ponds Program presented an overview of the current state of aquatic invasive species in Massachusetts and the Lakes and Ponds Program's efforts in education, monitoring, and controlling them.

Of the 3,000 lakes and ponds in Massachusetts, the Lakes and Ponds Program's data suggests that 1/3 of those contain at least one form of aquatic invasive species. These species choke lakes and ponds not only affecting recreation, but also wiping out native species and having economic impacts. The aquatic invasive species are brought here by ship ballast water and aquarium dumps and then are spread by boat trailer with plants- about 90% spread via boats.

Flannery discussed established species, pioneer infestations, and invasives to watch in the future.

In Massachusetts, the established species are: Eurasian Milfoil, Variable milfoil, Fanwort, Curly Pond Weed, European Naid, Water Chestnut, Asian Clam, Purple loosestrife, and Phragmites.

Pioneer infestations are: Asian Clam, Parrot feather, Hydrilla, South American waterweed, Yellow floating heart, Flowering rush, Swollen bladder wort, and False dark mussel.

Future threats (species that have not been found in MA but the Lakes & Ponds Program is actively looking for) include: Zebra mussel, Snake head, Quaga mussels, and Didymo, which can spread from single drop of water and came to this country via felt soled waders.

Economic impacts include power plant operation, property losses, and money spent to control.

DCR's education efforts include:

- Weed Watchers program- Lakes and Ponds Program staff travels to watershed groups and lake associations to conduct identification courses for the group,
- Boat Ramp Monitoring- seasonal staff is hired to check and to have boaters fill out surveys; and
- Educational Materials- Lakes & Ponds Program has pamphlets, key rings and signage available and has a website. There is also an email for the public to use if an invasive is suspected. Lakes and Ponds Program staff provides materials at the sportsmen's shows booth.

Staff has also trained volunteer monitors to sample Zebra and Quaga mussels and identify them through microscopes. The volunteers are asked to sample two times per month and this program puts Massachusetts way ahead of other states regarding monitoring of these species.

Flannery gave an example of an Early Detection and Rapid Response, which happened at Lake Rico in Taunton. Other projects and situations he highlighted were: the water chestnut harvest in the Charles River, the 130 acres of Fanwort in a DCR pond, and a \$100,000/year harvesting project that involves mechanically harvesting and hydro-raking of water chestnut in Fiske Pond in Natick. He further explained that the earlier aquatic invasive species are controlled, the faster and cheaper it is to get rid of them. Once they are established, it is harder to manage them. This is a problem for lake associations, since often a treatment is done only for one year to get things under control, but then the association stops treatment and the aquatic invasive species reappear.

The WRC thanked Tom Flannery for his presentation.

Kathy Baskin reminded the group that the October meeting would be held tentatively on the 16th at the Cranberry Experimental Station.

The meeting was adjourned at 2:44 PM.

Attachments distributed:

- Current Water Conditions in Massachusetts, August 21, 2008
- Request for Determination of Applicability under the Interbasin Transfer Act: Pioneer Energy Center. WRC Staff Summary, August 21, 2008
- Responses to Water Resources Commission Questions, dated August 8, 2008
- Letter from Parker & O'Grady to Massachusetts Water Resources Commission, Re: Pioneer Valley Energy Center Request for Determination of Applicability under the Interbasin Transfer Act (MWRC Meeting Scheduled for August 21, 2008), dated August 15, 2008
- Letter to Kathleen Baskin from Eileen Simonson on Pioneer Valley Energy Center (PVEC) Request for Determination of Applicability under the Interbasin Transfer Act (ITA), dated August 20, 2008