Park Tower CONDOMINIUM ASSOCIATION
5415 N. SHERIDAN ROAD • CHICAGO, IL 60640 • (773) 769 3250 • FAX (773) 769 0047

Board of Directors Special Meeting
Monday, January 28, 2008
Minutes

In Attendance George Pauley, President; Carlos Vargas, 1st Vice President; Sandra Goldberg, Secretary; Laura Cossa, Treasurer; Steve Hanna, Property Supervisor; Tim Patricio, Interim Property Manager; Mavis Mather, Assistant Manager Business Operations

Absent Phoebe Helm, 2nd Vice President

Call to Order: (7:05 p.m.)
The Meeting started with a cooling tower presentation by Elara Energy.

Board Member	Question for Elara Energy
George Pauley	The last time we had a lift, they had to close Sheridan Road. *Steve Maze stated that he would anticipate that they will need to close Sheridan Road again.*
Steve Hanna	Will they have to close Lake Shore Drive as well? *Steve Maze stated that they will only need to close the roads that the helicopter blades overhang during the lift. I don't see that being a problem. They only close the roads that the blades overhang when the load is on the helicopter.*
George Pauley	How many floors of the building do we have to clear out? *Steve Maze stated that the top two occupied floors of the building would need to be cleared out.*
Carlos Vargas	I would like you to elaborate a little on the tower itself, you have on the items D and E scope for electrical and control. Some of these units come with units that are self controlled, or with electrical and control contained in the units. Is that the case for this or why do you have the electrical and control there? *Steve Maze stated that they wanted to look at the system as a whole, the chiller, the condensing pump, and the towers. None of the tower manufacturers have their own stand alone controls that tell us what water temperature we want. We have to look at the existing control system and we have to expand the control system to operate the condensing water pump as well as the cooling tower fans. Your existing system has an aqua state that is attached to the pipe, it just sees it and turns the fans on and off with a binary control. Now with the variable speed drives we can control the speed of the fan with an analog system. We want to slow the condensing water pump also. We need to get controls in place that only recognize one chiller operating so that we can slow the pump down.*

Board Member	Question for Elara Energy
	So the electrical part is not just plugging everything in and turning it on. *No unfortunately this is more work.* We have a figure around ourselves of so much money. What is really the cost of the tower itself, the electrical, and the tower controls? *I don't have the breakdown with me but I know that the total cost of the project, or full implementation cost, including engineering permits, contractor fees, to be about $300,000.*
Steve Hanna	You had mentioned about the difference between the water temperatures and how it would save money, about $10,000 annually. I assume that the number is based on today's utility costs. As it increases next year and the year after you are going to save more and more money. *Yes, and I think that we are conservative on that estimate for savings.*
Tim Patricio	You have done this work at other buildings where you have done studies showing what mechanicals you can change and how that impacts the system. You said that you had been conservative before, when you say conservative how conservative? *Steve Maze stated that we are saying $10,000 but I would not be surprised if you saved closer to $15,000. By the time that you get the strategies of the variable speed fans and the pump running. That condensing water pump is only 75 horsepower. You are not talking about a little pump; it dwarfs the horsepower of the one fan upstairs on the cooling tower. It is a source of energy to attack in this building to lower overall energy consumption.*
Carlos Vargas	What is the condition of the current pump? *It is the original pump that has had a motor replaced. I do not know bearings, the loop, power, and whether that is all in good shape; it is the original pump to the building.*
George Pauley	So replacing that pump will pay for itself very shortly? *Yes, again 75 horsepower energy that the majority of the time I can slow the speed down, that's a cubic relationship, if I can cut the speed of the pump in half my horsepower becomes 1/8th of the original horsepower. This is a huge opportunity for savings.*
Laura Cossa	In your experience, how did the price of the cooling tower increase over the last ten years or five year? *Steve Maze stated that you would need to look at the price of metal. Metal has so dramatically increased because of the floor increase. We are finding in our industry that contractors are unwilling to lock in prices on heavy copper projects for any more than 7 days because of the volatile market. I am not seeing any end in sight to that. I have never seen the cost of a cooling tower come down.*
Laura Cossa	What is the warranty on the cooling tower? *What we do in all of our projects is that we mandate a 1 year warranty and then ask for an optional price so you can see what it would cost to get a 2nd year warranty as well. You will see one year being included in the bid along with an option for a 2nd year.*
Carlos Vargas	Are there any maintenance contracts that go with this? *Steve Maze said that the maintenance is part of what the 2nd year is all about. When we put together our documents we say preventative maintenance of the first and second year is also the responsibility of the contractors. What they generally do then, is prepare a maintenance contract that in the first year is*

Board Member	Question for Elara Energy
	zero and then shows exactly what they are going to do for that. In the second year, it is whatever the option cost is that is on there. The way that our documents are set up, it is like a maintenance contract on the cooling tower. Let's talk about what maintenance would actually occur on the cooling tower, the degreasing of the boners or the belts that are used for driving the fans, things like that. This would not cover things like cleaning out the basin if the chemical treatment were not done properly or anything along those lines. An interesting point is that we do not include the implementation process. We do not make the mechanical contractor bring in his own chemical treatment contractor; you already have a chemical treatment contractor in the building. What we do not want is for those two guys to be putting different chemicals in the system. Ultimately when the system gets started up we work with your buildings existing chemical treatment contractor to get the chemical treatment up to speed.
George Pauley	When you take a look at making recommendations to us about which particular vendor to purchase from, or manufacturer, what are some of the things that you take into consideration when making that selection. Are things like reliability of their products in the past considered? *Steve Maze stated that they have gone to three manufacturers where reliability across the board between the three, Evapco, Baltimore Air Coil, and Marley, are the three big names in the industry and probably have 95% of the cooling tower business if not more. For reliability across the Board they are generally the same. What we look at is efficiency, how big are the fans that are needed to meet the specifications that we give them, we look at first cost. As I was saying before about the helicopter we have to be cognizant as to what the heaviest section weighs, because if we go beyond 8,000 lbs we need a massive helicopter which makes the overall project less economical. We also have to look at delivery dates, lead time especially in time sensitive projects.*
Carlos Vargas	What is the difference in weight between the current tower and the new tower? *Steve Maze stated that the existing tower is somewhere in the order of 54,000 lbs. The new tower is about 40,000 lbs.*
Laura Cossa	What is the life on that? *Steve Maze stated that the life expectancy would be about 25 years.*
Carlos Vargas	This one has about 35 years on it right? *Steve Maze stated that the current tower had about 35-37 years on it. It needed some help to get there. 10 years ago you really dove into it and made some serious repairs to it.* You are making a recommendation and I agree with you about the physical dimensions and the weight efficiency. *Steve Maze stated that Elara was pretty sure that they were going to come back to the Board shortly and say that Evapco is really the way to go in terms of the new tower. We don't want to tell them that at this point. We want them to get out here and make that we are still making the sale hard to get the cost as low as we possibly can for you.* How far down can you get them to go on the cost? *Steve Maze stated that they try to do most of that up front, but ultimately it is the mechanical contractor that will write that check to the manufacturer. Ultimately he is the one that will try to negotiate them down even more. This will be reflected in your overall cost for the project, but untimatly he is still paying for it. So the true negotiation is between the mechanical engineer and the cooling tower provider.*

Board Member	Question for Elara Energy
	Now that you mention that, what mechanical contractors are you thinking about? *Steve Maze stated that there are a number of contractors that will be considered.* Name one contractor. *Steve Maze stated that Oakbrook Mechanical and Hill Mechanical were two very big contractors that they have done a lot of projects with. Team Mechanical, we have used all three of those contractors to do cooling tower replacement projects.*
Sandra Goldberg	Which of the manufacturers have you used in other buildings? *Steve Maze stated that they have used a lot of Evapco cooling towers.*
Laura Cossa	What about in similar buildings? *Steve Maze stated that they have used Evapco towers in similar buildings to this size. 990 Lake Shore Drive was a recent project that used an Evapco tower, 653 Kingsbury also used an Evapco.*
Sandra Goldberg	Why would you have used those instead of the other manufacturers? *Steve Maze stated that it comes down to the fact that Evapco has a different style to the way that they flow water over their fill. They have a true contra flow design instead of a cross flow which makes the tower more efficient. We are starting to see that a lot. We have feed back from all the Chief Engineers after the projects are done, I didn't think that I would like it but it makes sense. We did one two years ago at 3930 Pine Grove.* Do the manufacturers give any incentive to your company to use Evapco products? *Absolutely not. Nor would we solicit or accept any incentives.* So this flow is different in that it is vertical, is that it? *No it's the airflow, the fan sits on top and the water does flow down, but their inlet air comes in through the side and goes straight up through the fill with the existing tower it actually comes in sideways. The air flow is flowing from a 90 degree angle from the water flow, which isn't as efficient of a heat exchange system as what we propose from Evapco.* So that's currently the system? *The current system has the 90 degree cross flow.*
George Pauley	And the other two manufacturers still do something like that? *Yes they do. So again that is only one of the advantages of Evapco. We are not there yet, we may end up coming back to you and recommending either Baltimore Air Coil or a Marley tower at such an economical first cost that we analyze it against the increase towards power and things like that. We might come back and say that this is the best value for you.*
Sandra Goldberg	So you would do a spreadsheet for us? *Yes.* When would we be getting that? *Again I think that we indicated that you would be getting that around the 8th of February. We will give them about a week to put their drawings together and that gives us two days to analyze it.* But regardless of the manufacturer over time it would save us $10,000? *No.* Just the Evapco would save us money? *Yes because they have the lowest connected horsepower of the preliminary selections that we have gotten so far.*

Board Member	Question for Elara Energy
Carlos Vargas	But any one of the three would give us an incentive for saving energy anyway. *Not as much so, again the preliminary and selections that we have received from the manufacturers, Evapco has the lowest connected horsepower, giving them a higher energy savings.* But what I was saying is that by replacing the unit itself we are already ahead. *Yes you're ahead for the base of the existing equipment; any of the three will offer you savings over what you have now. Primarily given because we want to put these variable frequency drives on the fan motors.*
Sandra Goldberg	Only the Evapco will save us $10,000. So that one will pay for itself whereas the other two wont. *Again don't tie the $10,000 to the Evapco. Tie the $10,000 to the whole condensing water system that we are trying to talk to you about. It's the increase in efficiency of the chiller, the operation of the pump, and the tower. The combination is what we are saying will save you the $10,000.*
Carlos Vargas	In page 3 you have given us a price of $14,700, is that a firm price, because then you have the schedule per hour? *That is just in case let's say you come to me and say that you want the chilled water pumps replaced too. That's an increase in the sole work that was identified; this is for anything that is outside of the scope that is in there. Otherwise it's a firm cost of $14,700.*
Sandra Goldberg	What is the cost for the 2nd year maintenance or warranty? *We don't know that yet, we will ask the contractors to provide bids.* On average though, from other buildings what do you remember? *No other building does exactly the same thing that you are doing. We have controls that we have to get done, we have a condensing water pump and we have a tower. Do I have a particular project that is that exact same scope; I don't.* I don't want an exact comparison, I want a ball park figure of what a 2nd year warranty would run would it be $10,000? *No that is less than half, probably $5,000 but to be honest that is a complete guess.*
Tim Patricio	But you have tied that into the $300,000 estimate? *Yes we have.*
Carlos Vargas	You know how political this city is, we have to try to start to kiss up to the Alderman here for the helicopter on April 5th. How secure are we about getting that day? We think that we can accomplish this but should we be working in a couple of dates with the Alderman? *Not yet. We do have a couple of dates written down; we have the 29th and the 5th already. Unfortunately, we had this happen with one project which delayed the project by a week, but when we came out the wind conditions off the 53rd floor are very different than what we have down here, and we had to delay the lift.* When should we start approaching the Alderman about this? *After your February 11th Board meeting. Once we get a flavor for where we are going and timing and when we have firm guaranteed dates on cooling tower delivery, then you can start the work on that.*
Laura Cossa	Why do we have to contact the Alderman, aren't you responsible for permits? *It's not us it's the contractor that is responsible for the permits. You have more pull with the Alderman because you live here, versus the contractor who is*

Board Member	Question for Elara Energy
	calling from somewhere else. This is what the point is. If you can say I am fine with them doing it at 9AM that has some sway.
Tim Patricio	On average how long is the permitting process once you have the information you need to apply for the permit? *About four weeks.* Once you have the specs on the cooling tower itself, then you can apply for the permit? *We can initially check with the city right away just to see if they have a problem with doing a lift in the area on those two dates. So we can get past that before we have anything. That can happen rapidly. Post that then the FAA will come and inspect the site and draw up a flight plan. Their work takes about a week and the whole thing about four weeks.* So is that why the February 11th Board meeting with the choice of the tower will affect lead to the information you would put on the application? *We won't go to a formal application until we have an actually mechanical contractor that will sub out the helicopter contractor. We won't go to a formal application for permit until we have a mechanical contractor selected.*
Laura Cossa	How many years have you been in business? *Steve Maze stated that he has personally been doing this since 1985. I was in contracting for 11 years, and now I am in the firm that I have now, this is our 8th year.*
George Pauley	How many of these have you done? *I don't know somewhere around 40 projects.*
Time Patricio	The fee of $14,700, I just want to be clear that is basically baring any hiccups, this is the remainder of the fee from Elara to finish the project? *Yes this is all the way through commission. We even come out at the end and make sure that the controls are operating the way that we intended them to originally operate. Again the system as a whole is what we look at.*

Topic/Agenda Item	Result/Action Item
Accept Cooling Tower Design Specifications	Upon due motion by Carlos Vargas and seconded by Sandra Goldberg, the Board voted unanimously to approve the contract with Elara Energy to complete the engineering for the cooling tower for an amount not to exceed $14,700.00.

Topic/Agenda Item	Result/Action Item
Adjournment	Upon due motion by Sandra Goldberg and seconded by Carlos Vargas the meeting adjourned at 8:10PM.

George Pauley, President

Sandra Goldberg, Secretary