

**GOVERNOR'S ENERGY POLICY TASK FORCE
MEETING MINUTES**

APRIL 3, 2001

**IOWA UTILITIES BOARD HEARING ROOM
350 MAPLE STREET
DES MOINES, IOWA**

MEETING MINUTES

This Governor's Energy Policy Task Force meeting was called to order by Chair David Hurd at 12:00 p.m. on Tuesday, April 3, 2001, at the Iowa Utilities Board, 350 Maple Street, Des Moines, Iowa.

MEMBERS PRESENT	MEMBERS ABSENT
David Hurd	Kent McLaughlin
Lee Clancey	
George VanDamme	
Roger Amhof	
Joyce Mercier	
Brenda Dryer	
Lana Ross	
Don Wiley	
Lisa Davis-Cook	
Sandy Opstvedt	
John Sellers	
Howard Shapiro	
Kevin Eekhoff	

Dave Hurd:

We will start the program today with Brent Gale who will be briefing us on House File 577.

Brent Gale, Vice-President Legislative and Regulatory, MidAmerican Energy

Brent Gale:

When I asked for the opportunity to address this Task Force it was not my intent to talk about any restructuring legislation and that included House File 577. My real purpose was to let you ask questions. I have attended several of your meetings and read the minutes to all your meetings. There have been a number of times that a Task Force member has said, "I wish we had a utility here to ask this question." My purpose here today is to answer your questions. I have done a little preparatory work. I have looked through your minutes and through other questions that have been proposed to MidAmerican. I have eighteen questions I have prepared answers for. I will pass those questions and answers out after my presentation.

There is no doubt that some of these questions and answers will reflect some of the things you see in House File 577. I will be glad to answer any questions you might have.

The first question, what does it mean when we didn't restructure the state? What it means is that it is unlikely that exempt or independent generators will locate in the state. They want to have a market close to where they locate. Since there will not be competition at the generation level in this state, do not look for independent power producers to locate here. As I will discuss in response to question three, unless there is a change in the law and energy policy in this state, do not look for regulated utilities to build in this state either.

Question 2: What is the status of purchase power contracts and generating plant requirements? MidAmerican estimates the need for an additional 1,500 megawatts during the next decade. That can be met by constructing plants, purchases from traditional facilities and renewables, load management and energy efficiency combination.

Questions 3: Why aren't the rate-regulated utilities building electric generating facilities in Iowa? Iowa has a law on the books that prevents us from doing that. That was the exact intent of that law. David Osterberg drafted that law and if you ask him, it was his intent that rate-regulated utilities never again build in this state. That law works. It is preventing us from building.

Question 4: What has been the traditional process followed with respect to rate-based electric generation by rate-regulated utilities? When constructing a plant under the traditional approach, utility investor's finance the generation and construction for as long as seven years before they find out how the regulators will treat that investment. Those investments are typically \$500 million and investors wait seven years before they can find out how that investment will be treated. Only after that seven-year period, have rate-regulated utilities been permitted to ask the Iowa Utilities Board how that investment will be treated. The last time we went through this, Iowa's regulators penalized MidAmerican's predecessors \$200 million which was approximately 17% of the revenue requirement of the last major plant added contending that the generation was excess capacity because load did not materialize during the recession. That plant today is one of the lowest cost plants in the nation. We still have not been reimbursed for the penalty. We hope you might understand why we are reluctant to build generation in this state given the fact that the law mandates that a penalty be imposed upon us and the law being drafted to preclude us from

constructing generation in this state. When I get to question 8, I will try to summarize where we are in the state.

Question 5: What actions can be taken to facilitate construction of rate-based electric generation by rate-regulated utilities? There are really three answers to this question. This is construction by rate-regulated utilities. First, we need to eliminate the prohibition that is in the current code, the siting law that effectively prevents rate-regulated utilities from building. Second, we need to eliminate that statutory mandate of excess capacity penalty. I will be glad to discuss why this is important in the question and answer session. Third, the Iowa Utilities Board should be required to tell investors in rate-regulated utilities in advance what rate-making principles will be applied to the investment. We are talking about investments of \$100 million to \$1 billion or more. We are not suggesting they need to tell us what the rates will be, but what the rate-making principles will be. They will do that in the context of a rate case, but that comes after it is too late to change the decisions that have been made. The plant is already built, investments been made, and it is up and running.

Question 6: What is the current process followed with respect to power purchase contracts by rate-regulated utilities? You have heard about House File 577 and the contractor provision. It has been suggested that there is some devious purpose to the contracting provision and it is deregulation as such. I hope that after these next two answers you will understand that there is nothing devious about it at all. How does the process currently work? Because we currently enter into contracts and have been entering into contracts as rate-regulated utilities for 50 years. We have a 30 year contract that expires in 2004. How does this work? The utilities execute the contract, it may or may not be after a competitive bidding process. The contract becomes finalized, irrevocable without breaching the contract or terminating the contract with a penalty of some sort. Some period after the contract is executed, which may be as long as two years, we can come in front of the regulators and say "here is the contract and we would like to recover costs." This is two years or more down the road, the regulators then get their first chance at saying we don't like to contract because... The because can be any number of things. There is a lot of risk involved with that because it is two years down the road. The regulators are looking at the contract in retrospect trying to remember what the conditions were two years before because those are the conditions that should govern prudence and reasonableness of the contract. This is an opportunity for second-guessing which does not benefit the consumers or us as regulated entities, but that is the process. Utilities try to manage this process and the risk associated with it by going to shorter and shorter-term contracts. We also use a competitive bidding process and pick the low bidder. That low bidder may not be an Iowa facility. That lower bidder may happen to be an affiliate. If the state or regulators do not want us to select the low bidder because it is not an Iowa facility or it is an affiliated facility, we need to have a mechanism by which the state can tell us that before the contract is executed. Because at that point it is too late. Even those strategies where we used competitive bidding, selected the low bidder, done a short-term contract, have not protected us from regulatory second-guessing. That is exactly what Gary Stewart's case was about that he filed before the board. Second guessing on whether we should have entered into a contract, or instead been required to build, even though the Iowa law does not let us build. That is what that case is all about. I would suggest to you that is not a good expenditure of your dollars, our dollars or our time to be litigating that.

Question 7: What can we do? If as a matter of state energy policy, the state desires longer-term contracts or desires a preference of purchase from Iowa facilities then a mechanism needs to be developed to convey that to the rate-regulated utilities. Let us know that is your preference. Let's

have some mechanism before the Iowa Utilities Board before the contract becomes effective, where the Board can say no, you cannot buy from this low bidder because they are from out-of-state, or no we don't want you to buy from the low bidder because it is only a 3 year contract. We need some mechanism.

Let me vary from what you will see printed in response to the questions and summarize where we are concerning generating capacity. Current policy is regulated utilities are not to build generation. We are to rely on energy efficiency and renewable energy. You will find that in the 1990 comprehensive plan for the state. It is still in the 2000 comprehensive plan for the state. That is what the current energy policy is. You don't build in this state if you are a rate-regulated utility. Our options are; buy, and generally, we take the low bidder. If the state prefers that we take a bid from an Iowa facility, even though it is not the low bidder, that needs to be expressed in the energy policy of the state. If the preference is buy renewables and that is all we do, we buy renewables. That becomes the preference of the state in its energy policy, that needs to be expressed. What is most important to the rate-regulated utilities is to tell us what the energy policy of the state is. Is it for the regulated utilities to buy? Is it OK to buy from their affiliates? Sell to affiliates? Is it OK if we buy from facilities that are not located in Iowa? Do we want to go back to the days where rate-regulated utilities constructed generation? We need to make sure in the policy debate that we understand that can be and is often cheaper to buy, then it is to build a long lived generating facility and try to rate-base it. Those are the decisions that this Task Force and Legislature must deal with. We need an energy policy in this state about generation. That is what the House bill was all about, not what it is today. If you go back to original House Study Bill 153, it was trying to develop a policy debate in this state. Let us know what the energy policy is because some long-term decisions are about to be made.

Question 8: Will there be brownouts or blackouts in 2003 because of inadequate generation in Iowa? That was a question asked in February in a meeting of this Task Force. The answer is no, but there will be more purchases from out of state to serve Iowa consumers.

Question 9: Is the cost of generation from traditional generating facilities between 4 cents and 10 cents per kilowatt-hour? I am providing you a handout that is unfortunate that not every Iowa consumer has access to this information. The Iowa Utilities Board may disagree about the breakdown of this handout. What this handout does is give you an idea of what is in our residential customer rates for service in the state of Iowa. Here in Des Moines your rates are about 9.6 cents per kilowatt-hour. That includes part of a fixed charge and it also includes some kilowatt hour charges. This gives you the breakdown. Why is this important? This is information that a consumer does not have. This is information that a consumer, particularly one that is about to make investments in energy efficiency, renewable energy or distributed generation, should have. When you make an investment what can you avoid? Unless you are going to disconnect from the distribution and transmission system, all you are avoiding is the generation component, and maybe not even that. As you can see on this, the generation component is less than 4 cents per kilowatt-hour. The rates that you have, the traditional component of that rate is currently less than 4 cents. We will concede that the cost of new generation is higher than the amount that is in rates today because new generation is undepreciated.

David Hurd:

If I cut my usage in my home by 50 kilowatt-hours, I will only avoid the 3.94 cents? I don't avoid the cost of transmitting those kilowatt-hours to my home?

Brent Gale:

Under the current rate design, you will avoid about 8.48 cents, which is usage based. You will avoid that amount by reducing your consumption by 1 kilowatt-hour. However, other customers are going to be picking up the cost of the items other than generation because those costs do not vary significantly with usage. You are still connected to the system. So the cost that we avoid by you not using a kilowatt-hour is primarily just the generation costs. This is a problem with the rate design in the state. If I am making an investment in a wind turbine for my home, what am I going to avoid? Am I going to avoid distribution charges or imposing distribution costs on the utility? No I am not, because I am going to stay connected to that system. Am I going to avoid billing charges? No because a bill is still issued to me. It becomes a matter of sending the customer the right price signals, whether that is in energy efficiency, distributed generation or renewable energy. Every consumer should have information like this.

David Hurd:

I suppose there is no point in going on with this, but it seems to me that if I reduce usage that also takes load off the transmission system that makes it possible to increase usage somewhere else without having to increase the transmission system.

Brent Gale:

We will get into that more with another question, but it is an important issue.

Question 10: Why didn't the rate-regulated utilities build renewable energy facilities to satisfy the Iowa portfolio requirement? That law was written so that we can't. The law requires that we must enter into contracts and you can't contract with yourself. If you want to increase the portfolio requirement and allow utilities the opportunity, that law needs to be changed.

Question 11: Why did the rate-regulated utilities challenge the renewable energy portfolio requirement in the Iowa law? I think this is important for you also to be aware of. The rate-regulated utilities were convinced that these contracts as they would have been imposed upon us, were excessively over-priced and would ultimately be found by regulators to be imprudent. As contracts, as they would have been forced on the utilities would have required that we enter into 33-year contracts paying more than 6 cents per kWh. You have on the handout the unbundled generation price that is in your rates today. At the time, that 6 cents represented 2 - 3 times what the cost of traditional generation was as it was reflected in our rates and at least 2 times what the cost of a new unit would be. To provide some protection against the disallowance by regulators, we asked the regulators to provide us assurance of cost recovery or allow us to include a provision in those contracts that would enable us to renegotiate price if the regulators ultimately disallowed the costs. The regulators refused to do that and 15 years of litigation followed. Ultimately we were able to negotiate a better deal for consumers and still enable the financing of renewable facilities. If as a matter of state policy the state wishes to encourage more renewables, then the state needs to provide assurance of cost recovery if the utilities are required to buy. In addition, there is a need for additional transmission capacity in northwest Iowa. In fact, that transmission capacity is preventing us from voluntarily buying more renewable energy from that part of the state.

Question 12: Is energy efficiency a source of energy? The point I want to make here is that I know you are referring to it as the cheapest source of energy. Without regard to cost, it is not a source of energy. It is not a source of supply. It is not electricity. It is a way of avoiding the use

of electricity. If at some point you need supply, you need a work force, you have to consider supply options. Energy efficiency is not a perfect substitute for supply.

Howard Shapiro:

I minute ago you implied that new generation was 3 cents because you said half the cost and that was 6 cents.

Brent Gale:

No, that was at the time when we were being forced into the AEP contracts. The cost of a combined cycle unit like to the one in a Cordova, would be somewhere between 4 - 7 cents per kilowatt-hour. Windpower can be very competitive. That is the reason that we were negotiating with renewables to sell these in northwest Iowa, because it was very competitive.

Howard Shapiro:

Without debating the word source, energy efficiency here is listed as .34 cents so as an option that is 10 times cheaper than new generation, right?

Brent Gale:

The energy efficiency number that is on there represents what the mandated programs cost under the Iowa law. That does not reflect what enhanced programs might cost. That is simply what the cost is in your rates today for the energy efficiency programs that are required under Iowa law today. That does not reflect what the cost of energy efficiency is except as to the mandated program.

Howard Shapiro:

It is still cents per kilowatt-hour generated. So, is it in some way related to avoided generation?

Brent Gale:

No, the .34 cents does not suggest that you avoid 1 kWh by that expenditure which is what we would have to calculate in order to put those on the same basis.

David Hurd:

That is just part of that \$44 million?

Brent Gale:

Actually it is the \$78 million. That is the charge for the current programs and charges being recovered for past programs.

Howard Shapiro:

Do you have a comparable number; you said 4 - 7 cents for additional capacity? Do you have comparable number per kWh for energy efficiency?

Brent Gale:

No, we determine that program by program. That is how we have to do those analysis.

Question 13: Are there regulatory impediments to energy efficiency? Yes there are; there are at least two. First the current design of electric rates does not encourage consumers to make

energy efficiency investments because consumers do not receive appropriate price signals. You will hear me repeat that later. We have some issues concerning price signals in this state. Consumers are not receiving the appropriate signals. Secondly, to the extent that energy efficiency depends upon voluntary actions by consumers it is difficult for rate-regulated utilities or any utility to rely on upon those programs to reduce peak load. Why that is important is that we have an obligation to serve peak load. We cannot rely upon energy efficiency programs to reduce peak load. We would still have to make a supply side investment to satisfy that. There may be ways around that, but it is a statutory impediment.

Question 14: What action or actions would assist the feasibility of distributed generation? State and federal regulators need to agree upon uniform interconnection and safety standards. That would probably be the most helpful in the advancement of distributed generation. Work is being done in this area and progress has been made. In addition, at the state level we need to send better price signals. We really cannot hope for some consumer to make a cost-effective investment in distributed generation if we are not sending the right price signals. To the extent that we depress regulated rates below market, we are not sending the right price signals. The extent that we average those prices across all hours of the year, we are not sending the right price signals. That is the second issue that would be extremely helpful on distributed generation. We do not oppose distributed generation.

Question 15: Is net billing the same as distributed generation? One of your prior speakers said it was, but it is not the same at all. Distributed generation is a smaller supply source usually located closer to the load. Net billing is a regulatory or legislative mechanism for creating subsidy for those that add certain types of distributed generation. There is nothing wrong with that; there are many subsidies. However, it is not a supply source like distributed generation. You can have distributed generation without net billing. Admittedly, net-billing makes it lucrative to put in certain forms of distributed generation.

Question 16: Why did the rate-regulated utilities challenge the net billing provisions adopted by the Iowa Utilities Board? It is important to note that those are not in law, those are in regulation. There are a number of legal issues, but legal issues aside, the most important of the non-legal issues and the most important issue at this point is the acknowledgement of the amount of the subsidy given the current rate design. In the written comments, an explanation quantifies the amount of the subsidy. I can cover this very quickly for you with that handout I passed out to you earlier. If you would take a quick look at that handout, all the items that have an asterisk to the left of them are costs that are charged on a per kilowatt-hour basis. In other words, they are usage based. The collection of those costs depends upon the registration on the meter. To the extent you allow a consumer with net billing facility to erase the registration from the meter, which is what net billing does. It erases the registration of a unit consumed. The consumer is able to avoid paying all the costs that are asterisked to the left. The amount of the subsidy grows to 8.49 cents under this residential consumer rate. The argument can be made that a renewable energy facility or some facility that is net-billed can allow the utility to avoid the cost of fuel. There is some dispute about that, but let's deduct the cost of fuel which is 1.49 cents on the current rates. The subsidy is at least 7 cents per kWh. By comparison, the federal tax credit that is being given to renewable facilities is about 1.2 - 1.5 cents per kWh. This is under great debate. If we are debating that, why aren't we recognizing the amount of subsidy that goes into a net-billed facility? Are we getting the benefit, as a state or a nation, that we expect from a net-billed facility by its contribution to the system. What we are suggesting here is a matter of energy policy, either federal or state in states that are regulated. If you want net billing, fine, but recognize the amount

of the subsidy. Recognize that all of us as consumers are paying for that because those cost ultimately get borne by all of us that don't have net-billed facilities. We need to decide if that is a priority as a matter of energy policy.

Question 17: Why don't rate-regulated utilities invest in environmental improvements that would reduce emissions from existing electric generating plants to a greater extent than is required by state or federal law? We would be willing to do that if we can get a forum in which the DNR is responsible for enforcing those requirements, the Iowa Utilities Board is responsible for protecting the economics of Iowa consumers, and the Department of Economic Development is responsible for economic development. These agencies would get together with operators of those facilities and decide this is what we want, if the cost is reasonable, if the cost is recoverable. We don't have that process in Iowa today. The bottom line is the state needs to look at its energy policy, environmental policy and its economic development policy. Looking at each policy individually would guarantee us that none of those policies would likely be consistent and successful.

Question 18: What can be done with respect to transmission facilities? There are six items that we suggest be done. Probably the most important is to resolve the federal and state dispute over jurisdiction. What we are suggesting and trying to do with the legislation that is before the Senate now is to try and develop an expression of the state's energy policy so that it is compatible with environmental and economic policy. If we have that as rate-regulated utilities and our affiliates, we can proceed forward and purchase power from the state or not purchase power from the state. Energy, environmental and economic policies are keys, and need to be developed. That is what we are trying to do with this legislation.

Howard Shapiro:

If utilities were to invest more in efficiency programs there would be some avoided generation. That generation we have a price on. If we had any kind of comparable price tag upon the efficiency per kilowatt that we would achieve, it would allow us to compare and the consumer to compare their rates in order to decide whether they want to pay 7, 5 or 2 cents more. Is that information possible to get?

Brent Gale:

Those calculations are typically in the energy efficiency plans that are filed before the Iowa Utilities Board. These are required to be filed under the law. The law requires that those be cost-effective. One of the ways we look at cost effectiveness is the benefit to society, which includes the avoidance of adding generation in the state or the avoidance of making a purchase within the state. Each of those programs is assessed under the Board's process and the determination is made. Some of those programs passed the test, others have not. Some of them require voluntary action on behalf of the consumers which makes it a bit difficult for the utilities to rely upon. Others do not require voluntary actions by consumers. The interruptible load programs don't require voluntary action; some of the load management programs to control air conditioning do not require voluntary action. Those we can rely upon to be present in order to reduce peak loads. Each one of those programs is looked at separately then all of them in the plan are looked at as a whole. I know each of the programs are looked at from the standpoint of whether is it more cost effective to do this program than it is to do one of the alternatives, such as purchase. I think that determination has to be made program by program. I am sure the Iowa Utilities Board could provide you with some of the analyses that were done.

Diane Munns:

Some of those plans go way back. They need to be redone in light of prices today.

Brent Gale:

I think the key is that the state should develop the policy. It should probably be a broad portfolio of approaches. It should not be what we have today which says energy efficiency and renewables only. It should be a portfolio approach that says that we want to maximize the use energy efficiency for various purposes. We want to use renewables and this is how we will determine what is cost effective for renewables. We want to have purchases that meet these criteria. If you are going to build in the state, we will do this to encourage you to build, but this is what we want. It is difficult to find an energy policy in this state today other than the statement that is in the Department of Natural Resources' comprehensive plan.

George VanDamme:

One thing about 577 that you spoke a lot about is energy policy. There is about half a page about energy policy saying the Iowa Utilities Board will study this issue. I envision that the Iowa Utilities Board will have to get together with the Department of Natural Resources and this Task Force. Is that correct?

Brent Gale:

The intent of the original bill was to address both purchases and construction by rate-regulated utilities. The construction by rate-regulated is highly controversial in terms of what would be necessary to incent and facilitate that in Iowa. We do not believe the Legislature would be willing to address that this year. We did think they could address the purchase power, which is just making a proceeding available before the Iowa Utilities Board. What we did when we drafted the original proposal was to say what will happen with purchase power and the Iowa Utilities Board needs to study how to encourage the development of a rate-based plants in Iowa. There was never any attempt to be asymmetrical but we did not believe the Legislature could address construction of rate-based plants this session because it is so complex. We said the Iowa Utilities Board could make a recommendation to the Legislature on how to deal with that next year. There is symmetry there but there is a one-year difference. We addressed purchase power this year and construction of a plant next year. The Iowa Utilities Board does that. There is a reason for that delay but we don't have time to get into that today.

Diane Munns:

I didn't understand... your answer was that there was not symmetry but with the new amendment, it addresses the rate-based plant.

Brent Gale:

There was symmetry but there was a timing difference. We addressed purchase power this year in the Legislature. Next year they would address rate-based plants based on the reports that the Iowa Utilities Board and this Task Force would provide. I would also suspect they would address renewables based on the report that would come from this Task Force. With the amendment, it is addressed this year, at least in part, by the Legislature. You still have to study it. I don't think that list of things you have to study was changed.

Diane Munns:

No, but it allows the utilities to put together a plan for a rate-based plant and get up front rate-making treatment from the Iowa Utilities Board and that is irrespective of any recommendation we make to the Legislature. It is not a difference between a year on purchase power and rate-based because the law does address both of those with the amendments last night.

David Hurd:

Thank you for being here Brent. We will now hear from Diane Munns.

Diane Munns, Iowa Utilities Board Member

Diane Munns:

I am going to hand out a copy of the bill that came out of the House last night. I am going to talk about that and the rate-making provisions in that law and how it is different from what we do today. Rate-making is understood by only a few people today. It is not entirely intuitive so I am going to go through that with you. There are a couple of things that bill does. It makes plants easier to site and build. It gives cost recovery assurance to companies entering into certain defined purchase power contracts from Iowa facilities. It gives the Iowa Utilities Board the authority to announce rate-making principles in advance of plant construction for units that are going to be put into the rate-based. There is an extensive reporting requirement for the Iowa Utilities Board from the Legislature next year on a variety of different topics. Many of them you have been addressing in this Task Force. I will not talk about the municipal joint financing part of it because Bob Haug is here and he is an expert on it. He will deal with those sections when you speak today.

I came into utility regulation in the late 1970s and early 1980s. That is the last time we put generation on line in the state. Every time we get into a supply shortage, it is extremely contentious. That was a very difficult time in the state. The public was in an uproar when we put those plants came on in the late 1970s and 1980s. They were not very well received by the public when they came on line. We had pretty large price increases with prices doubling at that time. Those were very extensive price increases for the public to take. We had new legislation that followed that era. The plant siting law came into affect. We had changes in the way that we did rate-making at the Iowa Utilities Board, which was then the Iowa Commerce Commission. We had lots of litigation over what was included in the prices when bringing those plants on. I believe Gary Stewart was a part of that. When you are dealing with an investment of this size, anywhere from \$100 million to \$1 billion, it is going to be contentious. The environment is a lot different than it was when we started bringing investment on 30 years ago. We now have a deregulated wholesale environment, which is very different from then. We have deregulated retail markets in the United States. We don't have any Iowa-based or Iowa-concentrated companies whose main focus is to provide power within the state of Iowa. We now have national and international companies who are looking for investment opportunities for their dollars around the country and around the world. With all those changes, it used to be when you wanted to make money you had to make an investment. You put in a plant and you got a return on your investment. With the wholesale market and our utilities operating in a much larger scope, there are different opportunities for investment. They are weighing all those things. We are in an era of a lot of uncertainty and risk. They are hesitant to make those kinds of investments. I am not saying that for only Iowa, you are seeing that hesitancy to invest all around the country. So to

understand what the bill does I want to explain the regulatory system that has been in place and how this piece of legislation proposes that be changed.

Utilities are given a monopoly. That means the customers who use electricity within a designated service area do not have a choice of who provides them that electricity. That electricity comes from their designated monopoly provider. Utilities that are given the franchise in that area have an obligation to serve all customers in that area. That is what we refer to as the regulatory compact. Utilities make the investment to serve and the customers pay for that investment.

When this state said last year that we do not want to restructure and we do not want to go to retail choice, they made a decision that we would continue in that regulatory compact relationship and that the Iowa Utilities Board, not the market, would be the judge of what is fair and reasonable to include in rates. We do that through a variety ways. The regulatory agency, in this case the Iowa Utilities Board, stands between the customer and utilities to balance those interests.

Each utility makes a decision on how it will serve its customers. It may build and own some of its generation. It may purchase some of its generation on a long-term basis from other utilities or generators. It may also go to the short-term wholesale market to meet its consumer needs. It puts together a mix of those in a way which meets consumer needs. The Iowa Utilities Board does not manage the companies and does not dictate to the company how it will meet its customer's needs. What the Iowa Utilities Board does is determine whether the company has been prudent in the management decisions that have been made and which of the costs that are associated with those decisions should be recovered in customer's rates. We determine how much should be paid and who should pay it. Under traditional rate-making, and the statute the way it stands now, the utility makes the decision to build generation. It then asks the state for the authority to build that generation. That is in the plant siting law. We say yes go ahead and build. Receiving that authority does not determine how much of their investment and how much they decide to build will be included in rates. That determination is made at the time the plant comes on line and is ready to be put into service. A rate case before the Iowa Utilities Board is held after the plant is completed and the costs associated with the plant are placed into rates at that time if it is determined that the plant is necessary to serve customers. Then rates are established only at a level that is determined to be reasonable. The Iowa Utilities Board also determines who will pay how much of the costs such as the residential, commercial or industrial sectors.

It is much the same process for placing long-term contracts in rates. The utility makes the decision to execute the contract and when it is needed for customers, the utility asks the Iowa Utilities Board to place it in rates and does that through a rate case. The utility must show that the decisions to buy power were good decisions and that the price they paid for that power is fair to customers.

David Hurd:

Is the Iowa Utilities Board prohibited from making these determinations at the time it grants the authority to build a power plant or prior to the time they enter into the purchase power contract?

Diane Munns:

Yes, we do that at the time of the rate case. At the time that it comes into service. The way that the bill changes what we do currently is that for generation that is purchased from plants built in Iowa, the utility can seek an up-front determination from the Iowa Utilities Board as to whether or not, if you are doing purchased power, that contract would be allowed. We would have 90 days

in which to do it. I believe that the bill envisions that there would be a competitive bidding process for us to look at in order to make that determination. Once we make the determination that the contract is fair a reasonable then when they want to put it into rates, I think it would have to be in a rate case. It would be an irrevocable decision and we could not revisit it.

We would do the same thing with power plants. When they wanted to build they would come in a say they would like an up-front determination of some rate-making principles that would be applied when we want to bring that plant on line. You would still have to go through a rate case because you have to determine the rates that would have to be paid, but some of the rate-making principles that would be applied. Those things would be determined up front. I think that is how this piece of legislation changes the way that we do it now. The decisions that we make now would be given binding effect in the future. That is a change. The Iowa Supreme Court has told us explicitly that current Boards do not have the ability to bind future Boards. We cannot give a decision now that would be binding at the time of a rate case. That requires a legislative change to do that.

The legislation also provides that once those rate-making principles are announced the utility then has the ability to take it or the option to leave it on the table. I do not want to give the impression that the rules for including investments in rates are unknown, that nobody knows when they go into this what the rules are going to be for including this investment in rates. The guiding principles for all regulatory agencies, including anything in rates, is found in the Constitution. You cannot take property without providing just compensation. Which means in that compact when the utility customers say we want you to provide this to us you must compensate the utility for the use of that property. In our context that means that utility property is committed to Iowa customers and used for their purposes, the Iowa customer must pay a fair rate of return and cover the expenses of that investment. What is reasonable to pay is the subject of much debate and disagreement. When utilities make an investment, they know that under the Constitution they will get compensation for it. They don't know exactly at what level, which is what I believe Brent Gale was talking about. The investor-owned utilities want that more finely tuned when they go into this investment rather than going through a rate case. Once we make a decision it goes to the courts and it is all looked at. Are you giving them a fair return? Is this fair to the investors? There are rules in place but I think they want the bill changes to allow them to come in and get more specifics on how those rules would be applied in the future. That is the way the bill changes things. It applies to those units that the utility wants to rate-based. It also applies to purchase power contracts from facilities in Iowa. There is an extensive reporting but the major changes are with the rate-making treatment.

George VanDamme:

Is it true that the utilities cannot collect for those decisions until the plant is actually up and running or actually buying the power? The allegation I have heard is that the utilities can start collecting the money as soon as you agree to that rate-making principle or contract.

Diane Munns:

I don't think that is right. What I think the bill does is say that we would announce the rate-making principles and it would still have to go through the rate-making process where we would have to come up with the actual rates. In coming up with the actual rates, the principle would be established. Whereas now, we debate the principle and application at the same time in a rate case.

Gary Stewart:

That is correct. As I understand it, an amendment clarifying this was approved when the bill was passed by the House. This requires the Iowa Utilities Board to specify the rate-making principles applicable to the power plant at the time of the application. The price to be charged to customers would not be determined until the rate case in which those principles must be applied. The Board cannot change those principles. The utility does not have to accept the principles and may withdraw its application. The utility can refuse to build the power plant. For example, a coal plant is going to operate for 40 years and the Board decides to allow depreciation of a 25 year period, the utility accepts that and builds the power plant, then that is the depreciation life that must apply to rates as I understand this language.

George VanDamme:

I have a lot of confidence in you and Diane plus your associates that you can figure out through performance rate-making, the rate-making principles to share both the risks and rewards on how a utility does this. Let me reinforce something else that Diane Munns mentioned. She couched this in terms of a presumption, but 16A, sub paragraph G, the Board shall adopt rules pursuant to chapter 17A regarding the filing and approval of contracts under this act including rules to ensure there is a fair and open bidding process for purchase power contracts. There is significant power to the Board and all parties that intervene in this contested case to start to make sure that these purchase power contracts are reasonable and prudent before they happen. As of the energy policy act of 1992 MidAmerican can enter into wholesale power contracts and that is a federal law and something this state cannot change. There is a lot of power in this Board for regulation. There is no retail restructuring in this bill.

Lana Ross:

Is there retail restructuring in this bill?

Diane Munns:

It does not give the customers a choice. It does not deregulate the generators. I think the concern comes where you have the opportunity for affiliates of the regulated entity to build or chose to do that. When we are talking about purchase power contracts, we are talking about power that will be priced at the market price. To the extent that a utility chooses an affiliate to do this and it is priced at the market price rather than the utility building it itself and rate basing it is the argument.

Lana Ross:

What is the relationship between the utility company and the affiliate?

Diane Munns:

That is where the competitive bidding provisions that George VanDamme is talking about come in. It must be an open bidding process and we must be able to look at the request for proposals to make sure that it is not designed to favor the affiliate over other bidders. We will be looking at the bids that come in to see that it is the lowest bid and to see that it is an arm's length transaction in getting a bid, if the affiliate bid is chosen.

Howard Shapiro:

I think I heard two conflicting things. The current legislation does not preclude power companies from building power plants.

Brent Gale:

Yes, it does. The provisions of 476A says that the utility must exhaust all reasonable alternatives. Effectively it is that language. There is serious doubt as to whether any utility could satisfy that criteria. Even if they could, the delay and associated litigation would take such a long period of time it would effectively discourage, if it does not prevent, a utility from doing so. You can always do more energy efficiency programs; you could always enter into a contract. Is that going to be more reasonable than the utility building? That is the question the Iowa Utilities Board ultimately addresses after the fact. We are suggesting that be addressed before a great deal of time and money has been expended. Even to get to that point we need to eliminate the provisions of the current siting statute that say we do what the current energy policy of the state is which is you do not build all new load and all load growth is met by renewables and energy efficiency.

Diane Munns:

I do not interpret it that way. That is a very strict interpretation. We have put load on in the state, granted it has not been the kind of extensive investments we are talking about here. We were able to go through the siting statute and get that done in a reasonable amount of time. I do not think there is anything in the statute that says we don't want you to build a plant here in Iowa.

John Sellers:

I would love to have a profit locked into every nuance of my operation.

Diane Munns:

I would like to talk about that for a second. People often say the utilities are guaranteed a profit. It is a difference between what people perceive to be a guarantee and an opportunity. The utilities are subject to the weather. We set rates based on a test year. As soon as the weather is hotter or cooler than that you have a change from what we set as rates. You then have an over or under recovery. All the damages that had to be repaired or replaced due to the ice storm in Des Moines a few years ago were not built into rates. That was something the utility had to pay for and we did not give a recovery for that dollar for dollar. If we have an extremely hot summer, they may sell more electricity than normal and make more of a profit at that time. There is no guarantee. Once it gets really out of whack is when the Office of Consumer Advocate or the utility can come before the Board and say we need to have the rates reset.

David Hurd:

We will now move on to Bob Haug.

Bob Haug, Executive Director, Iowa Association of Municipal Utilities

Bob Haug:

Thank you for letting me be here to talk about municipal joint financing, some provisions that take up more than half of House File 577. Two things have happened in getting ready for this presentation. One is the House passed House File 577 with provisions on joint financing that we have been fighting investor-owned utilities on since the early 1970s. The other thing that happened was that the Des Moines Register published the editorial I submitted. I will take the opportunity to highlight a few things from the editorial. Nearly 1 in 7 Iowans is served by a municipal utility. I think the time you take to learn about joint financing is worthwhile. It is a significant part of the population service. We need new generation to serve new load, retire

existing generation and hedge risks on behalf of our customers that are related to the wholesale market.

I would like to say a few words about what we intend to do now that we have, at least on the House side, some reasonable provisions for joint financing. A number of the state's 137 municipal utilities have embarked on a responsible plan to meet generation and transmission needs in our communities. They propose to build new coal fueled generation in Iowa using the cleanest, most cost-effective technology to meet part of their energy needs. They are determined to invest in both energy efficiency and renewable resources. Their goal has been identified to reduce the need for new generation and transmission by 8 – 12% through energy efficiency programs. They intend to supply 10-15% of needed capacity through renewable generation, such as wind or biomass. To achieve those goals we needed to have the ability to work together. The current law allows us to form a joint agency to build electric facilities, but archaic language in the Code and restrictions imposed at the urging of private utilities have made joint financing of these facilities all but impossible. We have never used the joint financing laws that have been on the books since the 1970s for any significant generation facilities. Municipal utilities have built new generation jointly, for example a group of northwest Iowa municipal utilities are co-owners of the Laramie River Station in Wheatland, Wyoming. This is the most efficient fossil fuel plant in the country. Their ownership in that plant came about only because Minnesota municipal utilities financed the facilities under Minnesota law. We were not able to do it under Iowa's financing legislation.

Joint financing is simply the joint issuance of revenue bonds. By issuing a single bond as an agency rather than having each participating utility issue debt individually, we are able to achieve significant savings for our consumers and also to facilitate the participation of projects by smaller utilities who could not afford the cost of debt issuance. If you fund a small piece of a generating plant or transmission facility, your share may not be a high enough dollar amount to warrant going out into the market with a bond issue because the cost of issuance is too great to make that happen. The alternative is to borrow conventionally, which raises costs for consumers. House File 577 contains provisions that enable joint financing and we are very pleased with that and are moving forward in the early stages of identifying a possible energy project for municipal utilities. I think it is important to point out that municipal utilities cannot build generation for the purpose of profiting in the wholesale market. However, at any given time, some of the new generation will be available to support short-term demands in the market and that is proving to be the case in California. The City of Los Angeles, Department of Water and Power is supplying excess generation to offset shortages there. Community-owned and locally-controlled municipal utilities have been a part of Iowa's electricity industry for 119 years. They deserve to be a part of its future. Municipal joint financing of electric facilities can benefit all Iowans and should be passed this year.

David Hurd:

What would be the most recent formation of a municipal utility?

Bob Haug:

The last municipal electric utility to form in Iowa was in 1976, which was the town of Aurelia. In the last few years we have had several new gas utilities form. The legal provisions for establishing a gas utility are a little more straightforward and less complicated. I know there are some cities that are looking at establishing a new municipal in the current time. We have had a number of municipal telephone utilities formed in recent years.

Howard Shapiro:

When you mentioned renewables and efficiency, you quoted something in the neighborhood of 20-30%.

Bob Haug:

Our belief is that there is a lot of opportunity when it comes to the demand side of programs. If we were going to invest \$1,100 a kilowatt in new capacity and in the alternative we could identify demand side programs that, over the comparative life of the generating plant, could provide the same reductions in demand for \$900 per kilowatt, we think we would be foolish to pass those up. Looking at those things together, we think we have a chance of achieving something in the area of 8%-12%. Once we have identified a capacity need we have, if it is 100 or 1,000 megawatts, our goal would be to reduce the need for 8%-12% of those megawatts by demand side programs. Our goal is somewhere between 10%-15% over capacity. We would attempt to meet those goals through renewable resources. We have a municipal wind farm at Algona, which has been effective at producing electricity at about 2 cents per kWh. There are some federal subsidies. It is no secret that Florida Power and Light is offering 20-year contracts at 3 cents per kWh. It is hard to look at any new generation, including a base-load coal unit, without getting to production costs of 3 cents. The problem is that the wind blows in Iowa at the wrong time of year. With a mix of generation assets including that level of renewables seems to make sense just from the fact that is going to produce electricity when the wind is blowing at less than the cost or above the cost that we get from a new base-load plant.

Howard Shapiro:

The load growth is 2-3%. If we need 1000 megawatts and we can get 25% from alternate means it seems to me that the policy we have, which is to meet new load growth through efficiency or renewables could carry us for quite a long time. Am I missing something?

Bob Haug:

Yes, the load growth among municipal utilities varies quite widely. We have some communities whose growth has been substantially higher than others have. Many municipal utilities do not own their own base-load generation. They may jointly own part of a generating plant that meets some portion of their total energy need. Other municipals buy electricity in the wholesale market. They have no generation. Several of those are looking to become owners of new generation. That is why we get to the larger numbers for new capacity. Among the reasons for the desire to do that is to hedge the wholesale risks of the wholesale market. We are skeptical that the wholesale market will develop that reasonable rate so we are sustained for any period of time. It is more likely in our view that rates will be cyclical. Rates will be reasonable in times of relative plenty in generation and transmission. When there are periods of scarcity, that scarcity will create opportunity for the exercise of market power such as what we have seen in California and elsewhere in the country. That would subject our customers to a high level of risk and the probability of price volatility. On top of that, we are concerned that much of the new generation being talked about is gas-fueled generation. That made sense when gas prices were at \$2.25-2.50 per million BTU. If gas settles in 18 months from now at about \$4.50-5.50, you are talking about some expensive power. Since our goal is to provide energy to our consumers over the long haul it makes sense for us to build base-load generation now and not depend on an uncertain wholesale market.

Sandy Opstvedt:

If municipals build new facilities under this joint financing, will they be allowed to sell excess power outside of the state, or will it be contained within the state?

Bob Haug:

They would be aloud to sell it anywhere they can. I think the important point is that municipal utilities are restricted in a couple of significant ways from building more capacity than they need. We will not be building capacity to meet the needs for the wholesale market or make a profit in the wholesale market. We will only find bond buyers for bonds that meet our own local needs. We have an obligation under the law to provide for the public purpose defined as the local public purpose. We don't think bond buyers will buy bonds for us to build a power plant to serve customers in Illinois or of MidAmerican Energy. When we build new capacity we will build it of sufficient size to meet reasonably expected growth in demand. At any given time, even without that, we would have periods when we would have excess capacity to sell into the market. That is the case now with Muscatine Power and Water and other municipal utilities make regular sales into the wholesale market, typically on a short-term basis with sales in durations as short as 15 minutes. I think that the presence of municipal generating capacity will have a positive effect on the wholesale market in preventing periods of scarcity, but it will not meet the needs of Iowa's consumers.

Lee Clancey:

How many municipal electric and gas utilities are there?

Bob Haug:

There are 137 municipal electric utilities in Iowa. That is more than any other state. We are in a region of the country where many municipal utilities formed. Minnesota, Wisconsin, Iowa, Nebraska, Kansas and Oklahoma have many municipal utilities. Many of these are very small municipal utilities. In Iowa, of the 137 municipal electric utilities, half of them have fewer than 1,000 customers. They have municipal utilities because private utilities at the turn of the century did not find those rural markets to be attractive. They did not want to invest there so those small communities formed their own municipal utilities.

There are 49 municipal gas utilities. Most of those are combinations of electric and gas municipal utilities. There are only 9-10 gas only municipal utilities.

The number of municipal telecommunications utilities is an elusive thing. There are about 42 utilities that have taken some active steps following the passage of an election to establish a telecommunications facility.

Those providing telephone services is limited to 3 or 4.

There are 20 some providing cable service and about the same providing high speed internet service. Those utilities that have all installed hybrid fiber coax system. That part of the system is fiber optic cable going down to neighborhood boxes then out to homes using the same wiring used for cable TV.

David Hurd:

Thank you Bob we will now go on to Gary Stewart.

Gary Stewart:

I appreciate this opportunity to speak to the Task Force. I think it would be appropriate to highlight areas of agreement before highlighting some differences. For example, last night at the House, included in its passing of House File 577, municipal joint financing. The municipalities' objective is to provide electricity to their customers over the long-term at cost based rates. That is precisely what our office wants for customers of rate-regulated utilities in Iowa. It is high time for the state to eliminate the barriers to least cost electricity for customers of Iowa municipal utilities. I also agree with Brent Gale's statement that we need a portfolio approach to generation, renewables and efficiency. I do not, however, agree that we should pass laws in the state of Iowa that put retail customers at the mercy of wholesale market. I'm afraid that is what House File 577 does. There is some disagreement as to whether or not it is deregulation or back door deregulation, but there is no question that if a rate-regulated utility in Iowa signs a contract with its unregulated affiliate that qualifies under the terms of the statute, then the Iowa Utilities Board has no authority to regulate the price. That is a wholesale transaction and the Board cannot regulate the price. The bill goes well beyond streamlining the procedures and standards for power plant siting which you have been told were intended to prohibit rate-regulated utilities from building power plants in Iowa. I disagree with that. I do not think that was the legislative intent. It makes no sense for the Legislature to say they will never allow rate-regulated utilities to build power plants in Iowa. That simply makes no sense. They also did not say our only source of electricity for the future was going to be from renewables and if it is not going to be from renewables we are just not going to use it, we will have energy efficiency plans. They said no such thing. They were concerned with the situation we faced at that time. The situation we face today is not excess generation capacity, it is a shortage.

What I refer to as the deregulation proposal in House File 577 is the power purchase contract section. The conditions that the Iowa Utilities Board would use for considering the contract, remembering the Board has no authority over the price, the Board would look at whether or not the construction of a new power plant in Iowa would improve the Iowa electric system reliability. It would also look to determine whether or not there would be economic benefits to the state of Iowa from a new power plant in Iowa. The answer to those questions should be obvious regardless of who owns the power plant. It's a given it is going to improve system reliability. It will create generation capacity. If it creates jobs in Iowa both in construction and operation, that is a given, economic benefit to the state. The Iowa Utilities Board is going to be compelled under this statute to approve purchase power contracts between rate-regulated utilities and their affiliates because the alternative is unacceptable. That alternative being, no electricity. How could they possibly deny approval of a contract if it satisfies those other two standards and they have no authority over the price? There is no choice involved.

Lee Clancey:

You say the Iowa Utilities Board has no authority over the price?

Gary Stewart:

The Iowa Utilities Board has no authority over the price paid by MidAmerican to an affiliate for electricity under a purchase power contract. The Board has no authority over the price of a generating plant in any event. The utility pays whatever it costs to build the power plant or its affiliate pays whatever it costs. Our concern is that cost of the power plant should be the basis for the price; not the identity of the owner. The cost of the electricity should be the basis for the price not the identity of the owner. Whether or not the owner is a rate-regulated utility or an

unregulated affiliate owned by the same owner. If MidAmerican could build, own and operate the same plant at a lower cost to its customers over the life of the power plant, then it is unnecessary and unreasonable to charge customers more than that price simply because the power plant would be owned by an affiliate. That is precisely what the power contract purchase provisions in this bill allow. I do not think that is good public policy. I think there are a number of solutions for the capacity shortage problem in Iowa. There are a number of elements that have to be considered.

The shortage of electricity in Iowa is not unique. There is a shortage of electricity and generating capacity throughout the country. It is most obvious in California but the problem is nationwide. It is compounded because we do not have a transmission system in the United States that was intended to allow long distance transmission between different utilities between different areas of the country to accommodate the need for electricity in different areas. The transmission system in the United States was designed to get electricity from the power plants owned by rate-regulated utilities to their customers and to be connected to their neighboring utilities so that in the event a power plant went down unexpectedly they would be able to get electricity from a neighboring utility.

In California, utilities were refusing to build power plants while at the same time they were pursuing deregulation. Deregulation didn't just happen last year in California. It has been pursued for a long time in many industries. It has been pursued for a number of years in electricity.

Why would a utility not build a power plant when it is facing deregulation? The last thing that a seller in an unregulated market wants is an excess supply. That means they make less profit. They may not even recover the cost of their supply if their supply is excessive. Consider the plight of farmers in Iowa. If the supply of soybeans and corn is excessive, what happens to the price? The same thing happens with electricity. If we have a shortage of electricity what happens to the price if it is not regulated? In California, it sharply increased. I think it was bad public policy that let that happen.

Streamlining the siting laws is one of the solutions but not doing away with it. We need to consider energy efficiency, demand side management, renewable resources and cleaner electricity. We need electricity but what we don't need is wholesale suppliers and deregulation. The easiest solution for the supply shortage in the state of Iowa is the same solution available in most states but I'm not sure it has been exercised in any state. That solution is to have the regulatory authority in this state require the rate-regulated utilities to build the necessary electric generating capacity in the state. The state of Wisconsin has that authority for the Wisconsin Public Service Commission. I am sure there are other states that have similar authority. Dr. Mark Cooper, Director of Research for the Consumer Federation of America says that is one of the most important considerations for the entire country as we face the uncertainty of electric deregulation and the consequences of it. The states need to retain the authority to require their utilities to build the necessary electric generating capacity so we are not subject to the risks of an imbalance of supply and demand; and then have the prices go through the roof as they have in California. It is my opinion that current law in Iowa would allow that. I think the Iowa Utilities Board has the authority, but it is not crystal clear. The utilities claim the current law prohibits them from building power plants. Many claim the Iowa Utilities Board does not have the authority to require them to build power plants. The simple solution is to write a law so that the Iowa Utilities Board clearly has the authority to require the construction of necessary generation and

transmission facilities for the state of Iowa. Then no one can complain that the state is stopping us from building power plants. No one complains that it is unclear as to who has the appropriate authority. The answer will be provided by the Iowa Legislature. I think that is the most critical element of the solution to our problems. I think there is another important element which has been referred to by most of the speakers and writers around the states struggling with the consequences of deregulation and that is the assurance of an adequate supply at all times. Mid-Continent Area Power Pool (MAPP) is a regional power pool and reliability organization. MidAmerican is a member of that organization. MAPP has an elaborate contract that governs their behavior in relation to one another to assure that we have an adequate electric generation and transmission system that is operated properly, reliably, safely and efficiently. MAPP system design and operating standards, section 8.2.1.1 prescribes generation capacity requirements for member utilities. The standard is that each member of MAPP must have installed electric generating capacity, adjusted for purchases and sales, not less than the utility's maximum integrated hour demand for the year plus a reserve of not less than 15%. That is the minimum reserve margin they are required by their contract to have at the time of their system annual peak. The utilities have voluntarily agreed to and signed the contract in the past. If that is the appropriate reserve margin for economically efficient, safe, and reliable energy supply in the upper Midwest, it should be a part of state law. We need to require it. Why not have mandatory reserve requirements so we can ensure the lights won't go out? We will have to pay for it. There is no question about that. The customers will pay the cost of having the "lights on all the time." The cost, not the excess profit.

David Hurd:

Are you saying that purchase power doesn't count as part of meeting the requirements?

Gary Stewart:

It does count purchase power and subtracts purchase power sales. That gets us to one final important point. In order to get the power plants built in Iowa, have cost-based rates and promote energy efficiency and renewable energy in this state, it seems to me that the generating capacity requirement for the rate-regulated utilities ought to allow no more than a set fixed percentage of purchase power from fossil or nuclear power plants. That limit would not apply to renewable resources so we could promote renewable energy in the state of Iowa. I would suggest that the Iowa Utilities Board should have some discretionary authority to assure that we have an adequate supply at times when they might have to purchase more than that set percentage of their generating capacity. I would suggest that 10% would be an appropriate number. No more than 10% of purchases from fossil or nuclear power plants, regardless of the owner, which could be an affiliate. It should be based on the cost of producing the electricity. It shouldn't be based on the shortage in the capacity or wholesale electricity markets. It shouldn't be designed to transfer the wealth from the retail customers of the rate-regulated utilities in Iowa to the owners of the company by having the unregulated affiliates own all the power plants. That is our concern.

Lee Clancey:

Can you state that one more time? You are suggesting that no more than 10% come from what?

Gary Stewart:

Let's assume that the utility has a 10,000 megawatt peak load on the hottest day of the year. MAPP requires they have 10,000 megawatts of electric generating capacity plus 15% more. That electric generating capacity would include its company-owned power plants and firm purchases and any purchase that contributes to having firm capacity available at that time minus any sales.

I would suggest that out of that requirement, out of 115%, no more than 10% of the total, or some maximum percentage that would be provided by purchasing in the wholesale market. It could be from an affiliate or an independent power producer not affiliated with the company. The reason for that is to minimize the exposure of Iowa retail customers to the risk of the wholesale market and the current shortage which is going to last a while.

George VanDamme:

You use the term affiliate a lot, but if it was an independent company, the Iowa Utilities Board doesn't have any control over the prices either. If MidAmerican bought from Florida Power and Light, it is part of the Federal Energy Policy Act of 1992 that defines whether it is an affiliate, non-affiliate or whatever it is. In wholesale markets and during times of shortage, regardless of regulation or deregulation, prices skyrocket because their base-load capacity was down and they had to buy at wholesale rates. Regardless of what we do, if we don't have generation at our disposal, and forcing them to building it here will probably keep some lawyers very busy for a long time, unless you pay the utilities the costs plus a reasonable profit you are depriving them of due process in their asset. Prices will go up substantially unless you have control over it. House File 577 does not really change a whole lot but it allows the Iowa Utilities Board to decide something up front on what is reasonable and what is not reasonable. If you tell them their contract is unreasonable then they buy in the open market or they don't buy.

Gary Stewart:

If they don't buy, then the lights go out. That is the problem.

George VanDamme:

They have an obligation to serve. They do not have an obligation to build. If the lights go out because of their imprudence, they will be sued. There is a substantial risk on their part.

Gary Stewart:

If the bill was not changing much in Iowa law I suspect it would not be controversial, but it is very controversial.

George VanDamme:

It requires everyone to decide something up front.

Roger Amhof:

Is it a forgone conclusion that purchase power is going to be at a higher cost than installed base-load in the state?

Gary Stewart:

As long as there is a shortage of generating capacity in the United States or region, an unregulated price is going to be the product of supply and demand. It is not just the capacity available. It is the ability to get that energy to where it is going to be consumed. We don't have a system that allows that because the transmission system was never intended to be used like that.

Roger Amhof:

The argument is based totally on the fact that the wholesale market is unregulated and can't bear in price.

Gary Stewart:

It is very volatile. There is a current shortage. If we are going to deregulate any business, we have to be close to a supply/demand equilibrium before we deregulate. There is a current shortage so prices can only go up if we had total deregulation. Coupled with that is the fact we are not able to get the electricity everywhere it needs to go because we don't have an adequate transmission system. It was never intended to accommodate that. That is like having a river and no bridge over it. Whoever has the business on one side of the river controls it.

Lisa Davis-Cook:

There has been a lot of talk about what are reasonable and prudent costs, profit margins and those sorts of things. What is in the law that actually allowed as the cost plus profit. I have heard numbers before, but I don't know if there is a specific number.

Gary Stewart:

There is no law in Iowa or probably anywhere else that specifies the percentage rate of profit that the owner of a utility gets or is allowed to include in prices. It is not a fixed number. The utilities' prices are based on annual revenue requirements over a consecutive 12-month period, usually a calendar year. That total cost of doing business forms the basis for their prices. The cost is allocated among all the customer classes. Prices are designed such that if those conditions were repeated in subsequent 12-month periods the company would collect exactly the dollar amount of its revenue requirement. It is not a guarantee of profit or cost recovery. It is setting prices as close as possible to match the cost per unit of the service the company will be selling. As the sales go up, the prices don't go up or down, they stay the same and the revenues go up. If sales go up, some of the costs are going up. It tends to match over time. It is only when you get a big imbalance between the price per unit and the cost per unit that a rate case is necessary, either resulting in a rate increase or reduction.

David Hurd:

Does the Iowa Utilities Board have the freedom to set varying rates of return as its judgement deems necessary in order to attract the construction of generation?

Diane Munns:

You are talking about a couple of different things when you talk about attracting generation. When we do it at the time it comes on line, that is when we set the rate of return.

David Hurd:

You cannot promise a utility anything as to what the rate of return will be if they build?

Diane Munns:

Right, that really is a pretty fact sensitive determination when you do that. Your parameters are that there can't be taking. You have to give them a return. It has to be based on some good principles.

David Hurd:

Have you considered the possibility of inviting both investor-owned utilities and others to bid on building a generating plant in Iowa and bid on what rate of return they want to earn on that? Then you select the winning bidder that would provide them with a rate of return. That would be a way of getting a rate of return which would attract capital. It would take the uncertainty out of what the

rates would be. I am sure that would make the rates go up, but the rates are going to go up if we don't build any generating plants.

Diane Munns:

I think what we are talking about is if the utility builds itself. We can then determine the rate of return. If someone else builds it, and they do it through a purchase power contract, we are talking about a competitive bidding process for that.

David Hurd:

Yes, but that does not bring it in under your rate-regulated rules.

Diane Munns:

No, the only way it comes under the rate regulatory feature is if the utility...

David Hurd:

I was asking about a process to attract people to be under rate regulation because you would offer them a strong enough rate of investment return.

Diane Munns:

The only one who is under rate regulation is the utility who is serving that service territory. That was the regulatory compact I talked about. Others cannot come under rate regulation, only the utility who serves in that area.

John Sellers:

If they don't choose to do it, is there any way that the people could effectively secede?

Diane Munns:

When you have a monopoly situation, they have an obligation to serve. They have to provide adequate services and facilities in order to serve. Given the choice of how you do that, then after the fact we review that is that reasonable, did they pay too much, and how much are we going to let flow through to the rate payers. I don't think there is any question about having enough power. There will be enough power. The question becomes at what price.

Brent Gale:

I would like to say that what you are suggesting is competition and that is what we worked five years to bring into this state. That is exactly what you are suggesting and that is exactly what we were trying to bring so that you would have a choice.

David Hurd:

We will now start our subcommittee reports. First will be the Renewables and Environment Subcommittee.

John Sellers:

This is similar to the report we gave at the last meeting. We looked at both the Supply and Transmission subcommittee reports and didn't feel like we needed to add much more information. We changed some of the wording and addressed a few concerns. The Renewables and Environment Subcommittee is interested in creating an environment in which renewables/alternatives fuels can become a viable part of the energy portfolio in Iowa. We feel is

it important to establish a standard system for net metering and connecting renewable energy generators to the transmission system; establish a fair cost for transmitting electricity generated from renewables sources; create a renewable portfolio standard of 10% renewables by the year 2010 and 20% by 2020; create a mechanism such as a renewable energy investment fund in conjunction with a fund for energy efficiency to support and advance technologies and provide a funding source for demonstration and commercial construction of renewable energy facilities. Although it will not be a major source of energy in the state of Iowa, hydropower should be encouraged and supported in areas and in a situation where the local infrastructure and interest is present. We encourage the state of Iowa to direct appropriate state agencies to coordinate and amend policies and regulations to promote, not hamper, the use of municipal solid waste and livestock waste in the generation of energy.

Another item we brought forth and would welcome the Task Force's input is the encouragement and possibly consider the use of incentives to promote participation in programs such as "Second Nature" in Iowa. Alliant in Wisconsin offers this program. They are looking at it for Iowa. Consumers would agree to subscribe at a given percentage of their bill to use a green energy source. It would cost them more but they would have the opportunity to do that. Across the United States, the average participation is about 1.5%. It varies from state to state but overall it is 1.5%. That is disappointing but you can understand that with the high energy bills at this time. It seems a bit foolish at this time to raise your energy bill even more. We are open to the use of an incentive to stimulate that type of program.

Lisa Davis-Cook:

Consumers get a percentage of their power from an alternative source?

John Sellers:

Yes, a renewable green source.

Kevin Eekhoff:

After reading the Supply and Transmission Subcommittee report and other reports it seems that energy efficiency is probably going to be our starting point. I don't remember what the figures are but there seems like there is going to be huge savings by doing energy efficiency with the existing homes, businesses and new construction. There is nothing in the state that requires any energy efficiency for new construction whether it is for commercial or residential. Ed Woolsey spoke to our subcommittee earlier and he said there are homes in the state that are heated and air conditioned for \$200 a year because they are built with energy efficiency in mind. I don't know if anybody in the room has a home that costs only \$200 to heat or air condition, but I really doubt it. Energy efficiency seems to be the place to start. I don't know how much we could save by just doing energy efficiency programs but the incentive now is that everybody is paying a huge bill. I work in a bank and this spring I have had many customers come in and say they are going to put new windows in, add insulation or put new siding on because of the higher heating bills. Why can't we form some type of incentive, whether it be reduce rates, money back or lower costs to promote energy efficiency more than what we have?

Joyce Mercier:

We talked about the LIHEAP and Weatherization program trying to help low-income people, but there are a lot of others who do not have the appropriate insulation in their homes, windows and doors are not tight, plus various other energy saving type of things. I remember in the last energy

crisis we cut our bills in our own home by insulating and doing some of these things. We think that energy efficiency is very important.

Kevin Eekhoff:

Think about yourself when moving to a new house. You look in the attic and see if there is insulation up there. You check out the windows. That is one of the first things you are looking at is the energy efficiency aspects. I just think that is going to be a big factor. If you look at all of the subcommittee reports, I think there is something on all of them about energy efficiency.

Lisa Davis-Cook:

If the Task Force wanted to do a field trip, I know that Senator Matt McCoy here in Des Moines has done a lot with energy efficiency in his home. He has hosted groups before in his home to see the different things they have put in. That may be something we could do if we have the time.

Lana Ross:

I had asked Senator McCoy what is bill was for the month of December. He told me it was only \$26.00 - \$32.00. It was quite unbelievable.

Lee Clancey:

What we are trying to do right now is look at what each of the subcommittees has put forward in draft form. Look at it in terms of things that are not being addressed under the subcommittees' task assigned. Are there things being addressed in a way that we need to tweak? Are there things being proposed that we do not want to propose? I think what we need to do when we look at each one of these recommendations is to really take it from ground zero and say the subcommittees have offered to us a starting point for our deliberations. With that in mind, are there things that the Renewables and Environment subcommittee have not addressed that you feel should be addressed? I would like to thank the subcommittee for putting in the item regarding the use of municipal and livestock solid waste. I think there is a lot of potential there.

Roger Amhof:

Do we have any idea how our environmental regulations will affect our coal plants in the next 10 years? Do we even have a guess?

John Sellers:

I have a little bit more of a guess. A couple of weeks ago before some policy decisions were made in Washington, but some of the folks that are looking at this future are looking at coal. Coal is going to rise in price and there is going to be a carbon dioxide carrying charge along with this increase. This is possibly going to stimulate new technologies in capturing carbon dioxide and disposing of it in some method. Everybody involved says we have to have coal down the road. From the environmental side, we are going to have to have coal in order to have capacity.

Roger Amhof:

My question comes from the fact that I am assuming there will be additional regulations that will impact the burning of fossil fuels down the road. This will lead to one of two things. It will either increase costs to provide more efficient combustion or it will be a reduction in the efficiency of the plant. We will have to start shutting down plants in order to meet these standards so we will be producing less electricity or fewer kilowatts hours with that plant. That may be a consideration that we need to take into account as far as looking into the future to get an idea of what

generating capacity we will need to replace. Not only add to what we have today but provide replacements for the next 10-15 years. One of the things I have seen lately is nuclear energy, which has been a bad word for a long time; now I am seeing editorials popping up where it is not so bad.

Kevin Eekhoff:

That is the third time the issue of nuclear energy has been brought up in this Task Force.

Roger Amhof:

One wonders what kind of a role nuclear energy will or will not play with distribution. These are all questions that we need to make and attempt to answer as to where we may be with these resources of energy. I don't know where you would find the answer.

John Sellers:

I would like say it is also a challenge for the people who are involved with renewables to get things moving along in a timely manner. Our project down in Chariton, depending on funding from the Department of Energy, is looking at 3-5 years more before we are ready to become commercial. We need to find a way that a facility can come into existence in a shorter period of time. The technology is there. The Danes have shown this. Who is able and willing to step to the plate and construct a facility in Iowa in the next 2-3 years? It is a catch 22 that we are stuck in with the renewable community.

Joyce Mercier:

There is a comment I would like to make here that I do not think that investing in renewables is something we can really put off much longer. It is something we have to get going on so we can see the results we want. We keep putting it off by saying it takes so long to do this. We have to start.

Lee Clancey:

One of the things I am noticing, and I would like to see it more strongly stated, is to encourage and support the research and development of new technologies in our state universities and other places as they are available to ensure that we do have an adequate number of people who are looking for alternative and renewable fuel sources. We have a fabulous resource in our state universities, especially at Iowa State. The Iowa Energy Center is another great resource. We need to use those resources to a much higher extent than we currently are.

Howard Shapiro:

I would like to comment on that. I would be the last one to say that Iowa State University should not be encouraged and provided funds to do this work. I think we are talking about implementing technology and there is some development. I think Joyce Mercier's comment should be a driving force here. We want to establish a policy in the next 10 years that will get something done. Research is important and we should have vehicles for research, but research is something that is being done nationwide. What can we effect right now? We can effect possibilities and opportunities that will make things more viable for implementation and final development, but I would not want it to focus on basic research. I think that is important but I don't think that is where we will see the problems we are talking about solved in the near future.

Sandy Opstvedt:

Maybe instead of including it as a bullet we could put it down as a separate paragraph in itself to make Lee Clancey's point.

Lee Clancey:

I am just thinking in terms of hydrogen power. The use of hydrogen and the ability to stockpile energy through hydrogen at our wind farms. Is that technology researched and developed to the point where it could be implemented? No, I don't think so.

Howard Shapiro:

I don't think so either. I think we need the National Science Division of the Department of Energy to make major investments in this kind of technology. I do not see Iowa making major investments that are going to make that happen.

Lana Ross:

I think Iowa could make the investment to the consumer who uses the renewable energy so there is an incentive to achieve our goal of 10% renewables by 2010 and 20% by 2020. The state's investment goes to help buy down the cost of using the renewable product so the customer will take that as an alternative. You are paying the same price for your energy because there is a subsidy provided by the state to use the renewable energy at the same cost as other energy.

Howard Shapiro:

I would agree with that. That gets at my point too. I think the example, let's take wind power, we have wind power, and we are building wind farms. We want to take steps to expand the use of wind farms if that seems to be the right thing to do. If we compare that with hydrogen, I don't think we should be putting as much encouragement in the direction of hydrogen from our state efforts. We should be putting encouragement into getting wind power in and getting it used. Not that hydrogen is or isn't a good idea, I just don't think it is there. The infrastructure that would be needed in order to use it is far from ready. We have to make a major decision. If we want to go to hydrogen in the state of Iowa, we would be talking about the whole infrastructure. Obviously, we cannot afford that.

Don Wiley:

What percent of renewables do we have now?

David Hurd:

2%

Lana Ross:

What is the incentive to get it to 10% in the next 8 1/2 years?

David Hurd:

This report says to create a renewable portfolio standard of 10%.

Lana Ross:

So, what is the motivator to make that happen? Therefore, we have the standard. What are we going to do to ensure we achieve that standard?

Roger Amhof:

The legislature would have to mandate it. That would basically be how it would have to happen. Then the Iowa Utilities Board would enforce it. The question is, at what cost would they demand the utilities be indebted to that portfolio or they would have to approve whatever costs recovery the utilities needed to achieve that?

John Sellers:

We are getting back to the original question. Are we going to be buying our energy from outside the state, or are we going to try to use the natural resources, such as wind or biomass, to create value from within the state and use that? Or are we going to say, the bottom line today is that this is cheaper, so we will just continue to let the folks in Wyoming benefit from our attitudes.

David Hurd:

It strikes me like we have some degree of agreement here with some comments that the subcommittee needs to incorporate into the document. Lee Clancey and I will be meeting next week to go over where we are on this. The thought then is to go on to the Governor and explain where we are at this time. We will look for his comments as to what he thinks. I am not concerned how good a drafting we do on this as long as we have our ideas down on paper to test them out. Do you want to go through a formal voting procedure on these subcommittee reports to tentatively OK them? How do you want to proceed so that Lee and I will be authorized to proceed with discussion about these issues?

Lisa Davis-Cook:

I have one area I have heard of discussed in other areas that they do not have listed on here. One thing that was brought up was the idea that there may be carbon caps at some time and carbon trading. There have been proposals I have seen, even though there is no market for carbon trading right now. We should specify that we have some sort of energy efficiency fund or portfolio standard, that if there are credits out there that are created by energy efficiency or renewable energy, and no one has sold and no one has gotten the monetary value for them, then the state can take the monetary value of those and put them back into this fund. I know Monica Stone and Sharon Tahtinen have worked on this area before. It is kind of futuristic if the market does develop but it is a way for the state to have access to that money that may be out there. I am not sure how much is out there but it may be something we could look into. If it is a way we can supplement funding for efficiency or renewables it would be a way to add some revenue.

John Sellers:

I have to say, as a farmer, I would be quite interested in where these funds went.

Lisa Davis-Cook:

It is only for the consumers who don't take advantage of it. If a farmer chooses not to mess with selling the credits and this is a way for the state to step in and take that revenue for the credits that no one is using.

David Hurd:

Can we return to the question as to whether we want to proceed formally or informally?

Lee Clancey:

There have been a lot of things offered here. There was some discussion about adding a piece about nuclear energy as a viable alternative for the future. There was a discussion on how to replace or refurbish old coal plants to accommodate biomass. There was some discussion on investing in renewables as something we cannot put off any longer and we want to get development established in the next 10 years, not just research. There was discussion that the state's investment should go to buy down the cost of using renewables and the proposal to allow carbon trading credits and futures as the program develops. It seems to me the subcommittee has some things you might want to go back and discuss regarding including them in your policy suggestions. I do not think we are ready to start voting on things. I would not be comfortable doing that right now because I think these are still in draft form. What I am looking for today is some consensus that the subcommittees are heading in the right direction and we are including the things that people feel are important to be included or not including those things that are not important. If we could sort of leave it at that for now.

David Hurd:

I think doing that at some point is important. We ought to at least say that yes, that seems OK. I do not want us to turn up late in June looking at this material as if it was the first time we looked at it and start tearing parts out and throwing it away. We have an accumulative process here to educate ourselves.

Lee Clancey:

At some point I think we are going to have to look format. Talk about what kind of format we want this all in so it is consistent between all subcommittee recommendations.

Lana Ross:

I think David Hurd's concern is well taken. If someone has a reaction to any part of a subcommittee report I think now is the time to say so. Not that we have to go as far as to vote on it but if someone has a major concern, we should talk about it now.

Sandy Opstvedt:

I have a question about Lisa Davis-Cook's comments on carbon trading. It has been months since we were discussing this but was there not a concern about companies like utilities that were part of large entities using the carbon credits for California to do away with their obligation in Iowa? I vaguely remember talking about that.

Lisa Davis-Cook:

I don't remember it. That is why... maybe if the subcommittee talked with Sharon Tahtinen and Monica Stone they might be better able to remember. I do not remember if it was the carbon trading we were concerned about or the portfolio requirements.

Monica Stone:

I think it was the portfolio requirements.

Howard Shapiro:

I have a concern about introducing nuclear into this particular section. First of all, maybe there is an issue with global warming that nuclear energy is better, but there are certainly serious environmental issues with nuclear waste disposal and I don't see that this fits into the character that is being talked about in this subcommittee report. There may be a place for us to address nuclear energy as a possible option but I don't think it is in this report.

Kevin Eekhoff:

I agree with you Howard but I just think we haven't talked about it at all.

John Sellers:

One comment I would have, in light of the diversity of information we received in the early part of the afternoon here, as we speak there are some folks who are possible negating several of our efforts. This is a concern to me. I think it was the last meeting that someone mentioned possibly having a legislative liaison or additions to our Task Force. Depending on which end of the table you were tuned into some of the things we were talking about would be totally moot. Things could have taken a giant step forward or backward depending on where you sit.

David Hurd:

That bill will either pass or it won't. I guess that at the present time and if it does it may be in the form it is now or it may be in a different form. I think our Task Force is very ill suited to try and follow that bouncing ball on a day-to-day basis and reach conclusions as to what comments to feed into that process. I think we need to stay on course as to thinking through what we think is the best policy for the state irrespective to what the Legislature is doing and then turn that in for consideration once we get it shaped up. I share your frustration.

Roger Amhof:

One of the questions I would have on this would be on the point of the portfolio standard. How do we come up with a number? How do we say 10% by 2010 or 20% by 2020 is an appropriate number? Are we grabbing a number that people have investigated or fact? How can a person get a better handle on that? It is a serious thing to say we are going to mandate that 10% of our energy will be from renewables by 2010 no matter what the cost. It may be the appropriate number, but how do you justify that.

David Hurd:

We have sources of information, in a sense, that a number of other states in the United States that have renewable portfolio standards and these numbers are in the same ball park. We have information about some countries in Europe that have in place and are operating at these percentages and greater. There is some indication from that there is practical experience. These are in a range that sounds pragmatic.

Kevin Eekhoff:

Even Bob Haug was talking 15%-18%.

Roger Amhof:

What I am saying is I don't know what is achievable.

John Sellers:

It comes down to what information you find credible enough to at least start believing. I have heard this 20% by the year 2020 given by Union of Concern Scientist, Repowering America presentation and several other folks.

Lee Clancey:

I am assuming that the recommendations we are coming up with are based in a lot of information we have already received. In our Transmission subcommittee, the recommendations we came

up with are based, for the most part, on information that we have received over the last several months. I am just assuming that is where that figure came from too.

Howard Shapiro:

We have to be careful that the 10% figure here means 10% of the total, whereas the 18%-20% that Bob Haug was talking about is of the new capacity. That is why I asked him the questions I did. Which would be close to 10% of the total.

David Hurd:

We are reasonably comfortable with where this is and we will keep working and come back to it.

Lee Clancey:

We will now go to the Transmission Subcommittee next. I will make a few brief comments and let Don Wiley make the actual presentation. The comments that I have are really about the way in which this report is being presented. What we tried to do is go over and make editorial comments on what Don had provided. The way it is laid out is that there are issues regarding transmission that are presented first. Then there are some general kind of proposals and conclusions. Then we have a set of draft recommendations followed by some very general Task Force recommendations. We did not feel those recommendations fit only under transmission. With that, I will turn it over to Don.

Don Wiley:

The issues again are just simple issues. They are not recommendations. We are just pointing out concerns and issues that affect the grid. These we accumulated by going back through presentations and literature that was presented here. The grid itself is used in ways never envisioned when construction started. We hear that across the table no matter which side we are listening to. In talking with Bob Haug, when they talk about joint financing and then they can go in and build a unit together, they are still having to build a unit and negotiate with MidAmerican or whoever it is to get this energy to where they want it to go. It is the same thing when we think about wind.

Once used by the neighboring power companies to exchange electricity it is now involved in moving large blocks of power sold at wholesale rates across regions of the country. Deregulation has produced a radical shift in wholesale transactions. In 1996, there were 25,000 individual sales between utilities of wholesale power. That number has increased to a number exceeding 1 million in the year 2000. When we were at Cedar Rapids talking to MidAmerican on their transmission planning we heard that the California situation has even changed the direction of sales. The transmission always used to go west to east and that is the way grids were laid out. We had certain constraints and connections to deal with. Now we see a large amount of power going east to west. It is completely changing the constraints and what interconnections that need to be dealt with.

The capacity has failed to grow with increased load of electricity. Construction has declined during the last 25 years at the same time more electricity has been added, so we have had an adverse relationship. Many of the transmission structures and lines have outlived their depreciated life. For the years 2000 through 2009 generation growth is expected to be 20%-25% while transmission growth is projected to add about 4%. Access and use of the grid is a challenge both within and between the states. Alternative energy generation in Iowa, such as wind farms, must now locate near existing transmission lines. For utility and end users to invest

in wind farms, the savings are taken up in pancaking and wheeling charges incurred from the wind farm to their location. We heard about that from Waverly when Glen was talking about they could produce it cheaper but by the time they got it to Waverly it was actually more expensive than what they were buying there so they had to do some trades. Entities such as Florida Power and Light interconnect with Alliant or MidAmerican and the IOUs must then deal with the issue internally. If you go back to the ENRON presentation and look at what he was saying when we asked about transmission, he said that was not his problem. They connected with the IOUs and it became their internal situation. Interconnection issues exist especially with states with agreements easily taking up to a year and the subsequent generated power being delayed. Siting controversies are and will continue to be heating up. The Not-In-My-Backyard syndrome aligns local landowners concerned about property values and the questions of health issues with the local environmental groups. These groups have become very effective at delaying or rerouting new lines. Transmission planning is now done over a long period of up to 10 years. Location of generation facilities precedes transmission planning and return on investment is the overall guiding philosophy. In order to adequately plan future generation with alternative energy resources such as wind and biomass we need to begin the planning process now for the transmission from different locations before waiting for the resources to be profitable and generating facilities to be built. There is no incentive for new construction of transmission lines to be built. Uncertainty over management and ownership of lines in the future is effectively prohibiting construction of new lines. If we think about what the wind power could be up in the northwest even if there were lines built to take that to Kansas City, it could take it to the central part of the state. When we talked to MidAmerican again, their guiding philosophy on engineering and planning of transmission lines is behind that of generation. What are they thinking about in generation? What will that generation need as far as transmission? It takes about 7 years, according to that interview, to plan the transmission. Once we have come up with the load, whether it be increased population or a new center of load needed, we come up with generation then we have to turn to transmission. To look at going up to the northwest for them is not profitable at this point. We are going on a profit motive basis and the planning for that is behind generation. The federal government has the responsibility for regulation of the grid through interstate commerce. The states have siting authority. Thus, an inherent conflict exists between the two. The FERC has been attempting for 15 years to turn the transmission grid into the functional equivalent of the federal highway system but has to deal with bundled cost of transmission which accounts for about 11% of retail costs as well as state and local siting control and concerns. FERC has issued FERC Order 888, which calls for the opening of the grid to third parties at non-discriminate rates, terms and conditions. FERC Order 2000 calls for the development of RTO and ISO in which the owners and the management of the transmission systems are not to be the same. All public utilities will become a member of an RTO. MidAmerican has counter proposed an independent transmission company under the supervision of MISO which would still be profit motivated but with multiple participation methods and performance based rates and incentives. Their concern is that by simply going to a bureaucratic RTO without the market based philosophy when we tell MidAmerican or Alliant or present owners of the transmission grid we are going to assume control of those, we will pay you back over a period of time. What guarantees how that management will run the lines? Will it be marketed oriented basis or not? They feel like it can. In Wisconsin, a utility did a similar plan when they spun off the transmission assets into a new company called the American Transmission Company which controls 6,000 miles of line and 500 substations. It is hoping to make money not only providing Wisconsin with power but with shuttling electricity from power generated in South Dakota to consumers in New York. This is still a market-oriented approach to the transmission and it is the alternative they proposed to FERC.

Our proposals in general are that the grid must be planned and managed under a regional or national basis across state lines. I do not think this is an internal situation that we can solve in Iowa alone. This plan should include expansion as well as systematic maintenance and replacement standards, worker protections, environmental impacts and must include substation planning and prudence review. Other standards should include line clearance, tolerances, age and use data. Rules of standard must be established and enforced. Eminent domain for construction similar to the Iowa DOT for highways is necessary. State environmental standards and local input need to be incorporated into siting. The RTO must be fully aware of NIMBY concerns and all recommendations should be thoroughly researched and thought out before being introduced to the public. We know that there is going to be an objection to whatever anybody recommends. We heard that from 20 years ago, they were not happy about what was going on. We cannot help that so we drop this proposal out here and see what the Iowa Utilities Board and citizens say, then adjust it as we need to have it adjusted. As I understand it, when Eliot Protsch was talking about the line that was being held up down in southern Iowa. Generally, it is kind of going in a straight line and not according to proper regulations as we see them now. If we research that ahead of time and don't put something up that just takes everybody's time until it is ready to go, we will still have the objections but we will have to deal with them. Future alternative resources for generation need to occur. Planning for those new lines to accommodate generation facilities needs to begin immediately. Planning cannot be done solely from a market-oriented approach. Just as incentives are offered for construction of new infrastructure for industrial development, incentives may need to be addressed for rate treatments on new lines or to offset the cost of lines being under-utilized during transition periods for new sources of generation. System reliability and infrastructure growth, not least cost planning, should be the standard. Open access to transmission needs to be reviewed so that the capital cost of transmission in the calculation of energy once it has reached the end user.

Iowa needs to understand and agree to the implementation of a regional entity that has the authority for planning, siting, maintaining and managing the regional grid. This needs to be an independent entity from the utilities that currently own the lines. The concept of a hybrid RTO/ISO and ITC should be investigated with a transmission grid operated in a businesslike manner but with the input of progressive public policy. Planning and implementation will involve the states in the region, all utilities owning transmission lines and current government regulatory agencies. A single minded task force appointed by the governors of these states for this purpose is recommended with final action recommended by May 1, 2002. Eminent domain procedures for line construction should be reviewed and streamlined. It is imperative that Iowa agencies be empowered and directed to safeguard the rights of Iowa citizens and the environment for the future. In Mount Pleasant, we have 2 four-lane highways going through, which are The Avenue of the Saints and Highway 34. I see a family farm, the farm is a century farm, and the highway goes right through it. For the most part, you can feel bad about it, but it has to happen. None of those people that I know of, unhappy as they are, have really been railroaded. There has been a significant process for understanding what is going to happen and negotiating and settling in court if needed. It has happened and the road is going through and those farms are gone. I think that system works well. Public education regarding the state's energy challenges must be addressed in a major initiative from both the executive and legislative branches. Citizen understanding of the energy issues and necessary solutions are imperative in order to neutralize the Not-In-My-Backyard syndrome. Any entity offering proposals for the construction of generation or transmission must be held responsible to present a plan that meets established recommendations with the corresponding approving agencies responsible to approve the

appropriate proposals as quickly as possible. Strict adherence to newly and publicly reviewed guidelines will enable the citizens to trust that the construction is occurring as responsibly as possible. Open transmission needs to be redefined but not eliminated. By implementing independent management, access remains open to all thus eliminating pancaking and costs. The cost to maintain the line and expand the grid needs to be borne by all producers using the grid. State incentives should be examined for the construction of lines for future use that would benefit the state.

The last two points are recommendations we thought about that really are not limited to the transmission grid. Statewide studies and analysis are needed in the following areas; outages, their number and cause, duration and corrective means, both historical and anticipated. Availability of electric energy for future needs. Anticipated needs and availability for staffing to operate a reliable system.

It just seems to me that there are some dedicated folks who work for the state and private entities. We need to try to bring these people together to form one consistent policy. It seems to me like they are scattered among the agencies. Our state has many dedicated and concerned experts both within and outside of government. The difficulty lies not in finding the information but finding the source that already has the information. A smaller commission of citizens similar to the DOT Commission appointed by the Governor should be formed. The task of the commission would be to streamline our state energy organization and to assist in leading the state in the implementation of our new energy policy.

David Hurd:

On the last point, could you talk a little bit about where the Iowa Utilities Board fits in there? I take it that this commission would not be the Iowa Utilities Board and the Iowa Utilities Board would continue in existence with its present function.

Don Wiley:

I think what we are envisioning is not eliminating but also not creating a new agency. There would be one more central control. So that if we talk about speeding up the use of renewables, there is a place to go and discuss that. What we see happening is that we have several experts but they are scattered in many different agencies and organizations. If we could have them concentrated by a task force or commission, we would have a centralized program. It seems right now we are very decentralized in what we are trying to do.

Lisa Davis-Cook:

I have heard some proposals that have been out there to develop a state energy commission because right now the Department of Natural Resources has the Natural Resources Commission and the Environmental Protection Commission, but the Energy Bureau falls under neither of those. The proposal to develop a commission that would work something like the Natural Resources or Environmental Protection Commissions but dealing with energy issues. I think it was Representative Hatch that had some type of proposal like that.

Don Wiley:

I keep talking about the Department of Transportation but I know the federal government gave money to the state of Iowa for the Avenue of Saints. They were questioning whether they should hold the state Department of Transportation to certain guidelines as far as dates and how they were going to do it. They decided not to. That is a lot of power within the state. When that

money comes into the state, it comes to one place. It is then moved from there through their plans and agencies to make happen what they think they need to have happen.

John Sellers:

In the eminent domain portion of your report, would it be helpful to take a look at adjacent easements along current highways and looking at abandoned railways routes to include that in the mix of the decision making process? We used to have quite a grid of railroads. Much of that ground has not gone back to farmland. It is going to be a concern to the agricultural community that some of these lines start going across fields when they wouldn't need to. I don't fully comprehend the problem in southeast Iowa over a straight line versus another route. I feel we need to look at the old railway infrastructure and whether that would be detrimental to the health and risks involved to the public if it were mixed with an interstate highway system. I think we need to look at this option as we are examining eminent domain. It would cause less pain and environmental damage if it were being done by supplementing existing infrastructure.

David Hurd:

In your subcommittee discussions, have you seen a place relieving stress on the transmission system by emphasizing distributed generation over the next 10-20 years? An emphasis on distributed generation might make solving the transmission question a little easier.

Don Wiley:

I would think it would do nothing but contribute to the solution. The managing of it still needs to be done in a more regional planning process. The same thing needs to be done with energy efficiency. I agree there is a schematic difference there since it does not produce electricity, but it helps us overcome our need for more electricity without any transmission.

Roger Amhof:

How are the owners of the transmission facilities compensated? What will the owner's position be in this regulated grid?

Lee Clancey:

That is what causes the pancaking of charges.

Roger Amhof:

I assumed that was part of the reason to get this under some sort of uniform control is to eliminate some of the pancaking.

Lee Clancey:

That is what the purpose of forming a Regional Transmission Organization is. The organization would come up with a way to in which to have flat rates for the use of the grid itself.

Roger Amhof:

Regardless of the way the electrons are flowing or how many.

Don Wiley:

To my knowledge there is no proposal that has that laid out as to what rates or dollar amounts.

Lee Clancey:

We can look at using existing infrastructure that is already in place and encourage the use of that through Iowa Department of Transportation or abandoned railroad right-of-ways and taking a look at whether or not there is a place for easing the transmission system by using distributed generation.

Jerry McKim:

I have one suggestion you may want to consider relating to transmission and generation. The brownouts occurring in California—all the electricity available at any price would not stop that from happening. It is not just an issue of generation capacity but also transmission capacity. Alan Greenspan told Governor Davis a few weeks ago that without at least a 15% or larger reserve, competition won't work. This goes for both generation and transmission, whether it is retail or wholesale. What that means is you cannot prevent market manipulation. In Gary Stewart's presentation, he commented about there ought to be an agreement through MAPP on what the generation reserve should be and that should be placed in the law. Maybe that law could also encompass transmission reserve also. Maybe there could be some investigation and talk about what that reserve margin should be in both of those areas in order to make a recommendation. At the very least talk about the need for some reserve margin because that has a lot to do with good policy and protecting the consumers.

David Hurd:

Now we will hear from the Supply Subcommittee.

John Sellers:

I appreciate the item on encouraging research towards the development of value-added biopolymers and other bio-products that together with crop residues have both a financially viable material and energy value. I think that shows great foresight in looking into the future and pulling something out.

Lee Clancey:

Concerning the last comment made on the Transmission Subcommittee report, we might want to say something about reserve margin of generation capacity.

Lisa Davis-Cook:

This is the question I have about the reserve margin in the transmission system. How would something like that work? Does that mean you have to have more transmission lines than you need if some go down?

Jerry McKim:

I asked Brent Gale the question about if they talk about this need for more generation; what have they done, what is the impact of that on the transmission system? There is some kind of line that they put in for every 500 megawatts. This is more than necessary to carry that load. It is not like they are talking about an additional line. It is the size of the line they are running is based upon carrying a certain load.

Sandy Opstvedt:

You just have to have the capacity to carry the load to put in reserve.

Lee Clancey:

I think it also has to do... it is a policy question that our subcommittee really didn't discuss at all. Maybe it is something we ought to think about discussing as a Task Force or as a subcommittee. Do we want a transmission system that just gets energy from one part of the state to another? Or, do we want a sufficient transmission system that carries electricity not only within the state but also through the state so that it has the capacity to carry electricity generated here to Chicago or Kansas City for example? That is something we have not addressed in our recommendations. I think that is a big issue with regards to transmission. What kind of a transmission system do we want to have in the state of Iowa? The lawyer I talked to at the Federal Energy Regulatory Commission believes that Iowa is in a unique position geographically to be able to transport electricity across state lines because of where we are located. Do we want to be that? I don't know that we have had that discussion. That might also serve as a reserve margin where we have the excess capacity to serve other geographic regions other than the state of Iowa.

Roger Amhof:

How would that kind of over-capacity serve the citizens of Iowa?

Lee Clancey:

It serves the citizens of Iowa because if we are not building generation capacity here, then we can tap off of energy that is going through the state from other generating sources. If we have a vibrant transmission system that allows energy to be flowing through the state we can take it off the grid as it comes through.

Howard Shapiro:

It seems like we need to be thinking about what our loads are going to be and then about if we have adequate transmission capabilities. Whether or not we want to build a system on top of that that would have capacity when we reach those things to do other things seems to me an economics question. That comes back to what Roger Amhof was asking. How does Iowa benefit? Do we get money for that? If we do, it seems we could look at the economics of that and say let's build it a little bigger. We would want to get a profit out of that. We would not want to do it otherwise. Maybe there is some profit in that. I am not sure how all that works and the different rules. It isn't a concern if there is no profit in it.

Lee Clancey:

Clearly, that is something that cannot be done in Iowa alone. It would be like building the Avenue of the Saints to the state line and then having it stop. It has to be done on a regional basis.

David Hurd:

The only note I have written down so far is to add a comment about reserve margin and generation capacity.

Roger Amhof:

Another thing I do not think we have addressed is the standards of reliability.

Sandy Opstvedt:

It is in the transmission part only with regard to transmission though.

David Hurd:

That was intended to be implicit in item one. That is part of an adequate supply for everyone.

Roger Amhof:

Yes, but I mean numbers. What is acceptable and what isn't?

Don Wiley:

The way I read this is that you are kind of touching on the discussion earlier. Number 1; we do need to assure that we have power. Number 2; we don't want to have that power to be purchased power at our disadvantage. We want to develop generation within the state so that we have some control.

Lee Clancey:

Any other comments on that? Let's move on to the Energy Efficiency and Demand subcommittee report.

Roger Amhof:

We have not made any changes. We did meet today and talked about a few things that we may make some modifications to this at some point. One of the things we talked about is the possibility of suggesting an energy economics curriculum in the schools. Whether that would have any advantage in possibly changing the mindset of the younger people about the use of energy. This may be something worth investigating. I have looked at the rate of return on investment on some the energy efficiency projects that have taken place. Some are good and some are poor. We talked about the possibility about how we could get accountability and oversight in what we were doing. For example, an operating organization that takes care of the state's energy efficiency efforts being subject to oversight by another agency to ensure we are getting the best possible results. We may be thinking about that possibility. We are thinking in terms of possibly using an independent contractor by using the bidding process where any contractor could bid on the operation of the state's energy efficiency program. If an investor-owned utility wanted to bid on it, so be it. That way it would be equitable to all.

There needs to be accountability and oversight involved in the operation of the program. The program should be goal-oriented instead of dollar oriented. Rather than the idea of spending a bunch of money and not necessarily being concerned about reaching a goal. We are thinking in opposite terms. We ought to have a goal out there to focus our efforts on. Right now, it seems to be somewhat backwards. We say we are going to spend a certain amount of dollars but we are not putting forth any goals as to how we are going to use that money. It is kind of open ended at this time. Programs are not uniform because of the fact that the RECs, Municipals and IOUs all have their own programs. You can be on one side of the street and have a program available to you and if you're on the other side it is not.

The other thing we talked about is that we have a several groups within the state involved in efficiency, research and implementation. This ties into comments earlier about having a commission to tie all these efforts together.

All the things we talked about at the last meeting are on the reverse side of the report. The first bullet point there was a suggestion to initiate an energy efficiency and conservation assessment study in Iowa. This would give us an idea of where we are today and how far we have come since the last study done in 1989. This would give us an idea of what we have been able to accomplish and where we might find some additional efficiency in the future. One would probably approach the easy stuff. Maybe we have gotten to the point that the easy stuff is gone and we

need to move on to the next level in terms of what the next most important gain to find efficiency could be done. The sub-points on the report are some things that the study should address. The first one is to measure the success of the last 10 years or so. Evaluate the effectiveness of the low-income weatherization programs in order to determine if that program should be expanded. If it is the most efficient way to achieve our purposes. To reveal areas that additional efficiencies could be gained and the costs. That goes back to doing the easy stuff and possibly having to move up to the next level. Identify areas where energy conservation could help to reduce demand and develop methods to promote conservation. This is educating the public. Evaluate the current delivery mechanism of our current programs and provide alternatives to delivery of future programs. That goes back to the possibility of having a general contractor coordinate the program. The final point is to identify sources of funding for future programs. Where is that money going to come from? At some point, we need to decide that on a number of issues. How will we accomplish the goals we have set? In the interim, the subcommittee suggests continuing the energy efficiency and conservation programs that we have. Possibly redirecting the focus more on helping the commercial and small business customers. We have a feeling that might be sectors that may have a great return on investment that has not been tapped at this point. We need to place the emphasis on residential energy efficiency programs to concentrate on homes that through energy audits are shown to have high levels of energy consumption. If you are going to go to the trouble of upgrading a residence, you want to make sure that it is using enough energy to make sure you can save some dollars. Putting a new furnace in a house that does not use much natural gas is not going to save you much. We would initiate an energy conservation program that would begin to change usage habits. This is possibly creating a public awareness campaign that draws attention to our pending supply deficiencies as well as promotes the savings of the resource. Another idea we talked about was setting minimum efficiency standards for new heating and cooling systems and appliances sold in Iowa. I am not sure how that would work on a statewide basis. It would probably work better on a federal level but it is still something to look at and discuss.

Lee Clancey:

I think you have done a nice job of identifying those areas in which energy efficiency and conservation could be improved. Concerning the setting of minimum efficiency standards for new heating / cooling systems and appliances sold in Iowa, I think we either say do something or don't do something. We don't want to say consider doing something; it is a matter in which these should be phrased. We are making recommendations that we want them to do something. If we want the Legislature to consider setting minimum efficiency standards, I think we want to say develop and implement minimum efficiency standards for all new heating / cooling systems and appliances sold in Iowa. You could even put a date on there if you want to. We are not asking people to just consider it. We want them to act to do or change something.

Howard Shapiro:

I think this a great list of ideas. I personally believe this may be the biggest opportunity that we have. I am concerned about us making it clear about what we mean regarding efficiency and conservation. For example, when we talked about focusing on industrial and residential sectors installing more efficient equipment and load management because there was little emphasis on energy conservation. Energy efficiency is energy conservation. We are using less because we are being more efficient. I think the word conservation has a stigma attached to it in context to this whole discussion. I don't think we want to suggest that our Task Force is going to be telling

people to sit in the dark and be cold. I know that is not what you intend, but there is a history to this. When we go back to the 1960s when energy conservation was the big term, that is what conservation meant. I think we have to be very careful about what we mean--more efficient and effective use of our energy resources for the purposes we put them to. We are either using energy, or we are not using energy. We have to use as little as possible to do the job. I think our wording needs to reflect that or else this may be left off. I do not think we want that to happen, particularly since I see this as a centerpiece for what we are going to be proposing. In terms of policy recommendations, something I see lacking is the emphasis also on the idea of incentives. The idea of potentially using our rates to pay for the things that could make this happen. Provide people the incentive to do it above and beyond some cost structure. The reason that is beneficial is if society makes an investment in these things we don't have to build these power plants. That is going to be the big cost we are avoiding. If I put windows on my house, I will be dead and gone before those windows have the closest possibility of paying me back a penny. I don't make that decision as a consumer because I want to save money. On the other hand, we as a society might say, let's get people to put more efficient windows in, it may cost us to do that as a society, but the payback will be to all of us. The payback will be because electric rates will not be as high because we do not have to build the power plants. It is not the individual person's economics that will dictate what kind of incentives we decide to make because we can do all the education programs but the point is that people don't turn the lights off and it is cost effective to put in sensors to shut them off. That should be an unnecessary expense but it turns out to be a beneficial thing to do. I think we should take a real proactive approach to energy efficiency here in reduction and waste of energy. That is not the same thing that we used to call energy conservation. We should be careful how we phrase it.

Roger Amhof:

What I had in mind in the use of that term was to try to affect human nature. There may be a better term. A good example of how people don't think about how they use energy, whether it is their's or someone else's, is I had a person who came in an hour early one day and was watching TV in the driver's room, yet he had every single light in the shop and warehouse on 1 hour before he clocked in. It never occurred to him that he should not do that. What makes a person do that or not do that is what I am trying to question.

David Hurd:

So like when you staying in a motel and you go out of the room, do you turn out all the lights. It does not affect you personally but it affects things as a whole.

Howard Shapiro:

I think that those things are all important. We should try to continue educating the public and make people more conscious. I still think there is a terminology that will put us in a category in some people's minds that we don't want to be in. The point is how efficient are we at doing this job. If we are using cars to get here, somehow we need to encourage people to use the most efficient cars we have. That sort of thing would happen through programs that make our collective decisions more cost effective. Otherwise, the price of energy has to go up higher before that decision is based upon what it costs to do it. All the California stuff has really made a big difference in peoples' thinking about energy conservation. We know that the cost of energy is the thing that drives that. The things we are talking about here ought to cause some economic choices to be made that are different then the market place.

Davis Hurd:

I looked at my energy bill this month. It cost me 8 ½ cents per kWh for the first 1000 kilowatts and 7 ½ cents for anything above that. That pricing structure is set up to encourage large use rather than to discourage it.

Brenda Dryer:

I think Howard Shapiro brings up a good point. I was just in the market for a refrigerator. I wanted to buy an Energy Star refrigerator. The cost for an Energy Star refrigerator was substantially higher. I did the math on how much I would be likely to use with regard to the savings per month. I did not buy the Energy Star refrigerator. We need to be developing an overall program to assist all of us does help the end consumer to make that decision. I would encourage you when you are at Sears, or some other store, to look at this. It makes it hard to justify the purchase, unless you have extra disposable income, when you are only going to save 2 cents per month. You have to look at the whole picture.

Roger Amhof:

How many of you go out and buy these energy efficient \$13.00 light bulbs?

Howard Shapiro:

That is a perfect example. If you think about the legislation that we haven't had in place, where we have been paying a portion of our utility bill to promote that sort of thing. The utility does not benefit from that, they are just the agents. We benefit from that if we use those dollars we collect to give people the bulbs because of the avoided cost of electricity later. I am not sure what those economics are but I am convinced that funding efficiency in the long run we will pay less for electricity. That is the kind of policies we need to set up here. The utilities do not want to be in the business of doing that for us, but they can be the agents. That is a mechanism that we have used and I think it is more effective then what we give it credit for. There may be other ways we could do it.

Lee Clancey:

Brenda Dryer's situation was a perfect example of the individual versus the collective decision making.

David Hurd:

I understand part of Wisconsin's recent changes they have created a new entity that is not the utilities companies, and the money that is being collected in the bills to be used for energy efficiency is going to the new entity. They decide what is the most effective way to spend it.

Brenda Dryer:

It would be uniform throughout the state no matter who the utility is you are still eligible for something for making the right decision to buy Energy Star products.

Roger Amhof:

That is where those comments came from earlier. The idea of getting one entity to provide a program that is uniform and available to everybody no matter who your energy provider is. Whether this is done by a state agency or independent contractor; whether it goes up for bid or not, it has to have oversight and accountability.

Howard Shapiro:

We should also think about loan funds such as we have used for public purposes. There is no reason why the industrial sector should not be able to cash flow the loan simply by the measures that they install. There are companies that will do that. The reason they can make a profit at it is that they know that there are things are going and make money at it.

Lee Clancey:

Anything else on this report? I would agree with Howard Shapiro that energy efficiency does have the potential to be the biggest piece of our recommendations. If you all will look at the draft subcommittee reports as they have been submitted today. If you do have any other thoughts, please transmit them to the appropriate committee members. I would like to ask the subcommittees to get together before the next meeting and incorporate those comments that have been given today. Then we will go over them again at the next meeting.

Are there any items for next meeting's agenda? Part of our next meeting will be a tour of the Iowa Association of Municipal Utilities facility.

David Hurd:

We have been spending all of our time talking about the electricity issues. I wonder if it is time to start talking about the petroleum, gas and natural gas issues concerning transportation and agriculture.

Sharon Tahtinen:

I think there is a difference between what you heard and the pricing of fuels in each of those areas versus energy policy. There are many issues besides pricing that could be covered.

David Hurd:

If anyone has any thoughts about presentations for that area please contact Lee Clancey or myself and we will have Sharon Tahtinen work on scheduling those presentations.

Lee Clancey:

If you have any ideas other than continuing to work on the subcommittee reports and agenda items, please let David Hurd or myself know. If there is no other business, we are adjourned.

NEXT TASK FORCE MEETINGS:

May 1, 10:00 a.m. – 2:00 p.m. – Iowa Association of Municipal Utilities Office, 1735 NE 70th Avenue

May 17, 10:00 a.m. – 2:00 p.m. – Venue yet to be determined.

MEETING ADJOURNED 3:45 PM.