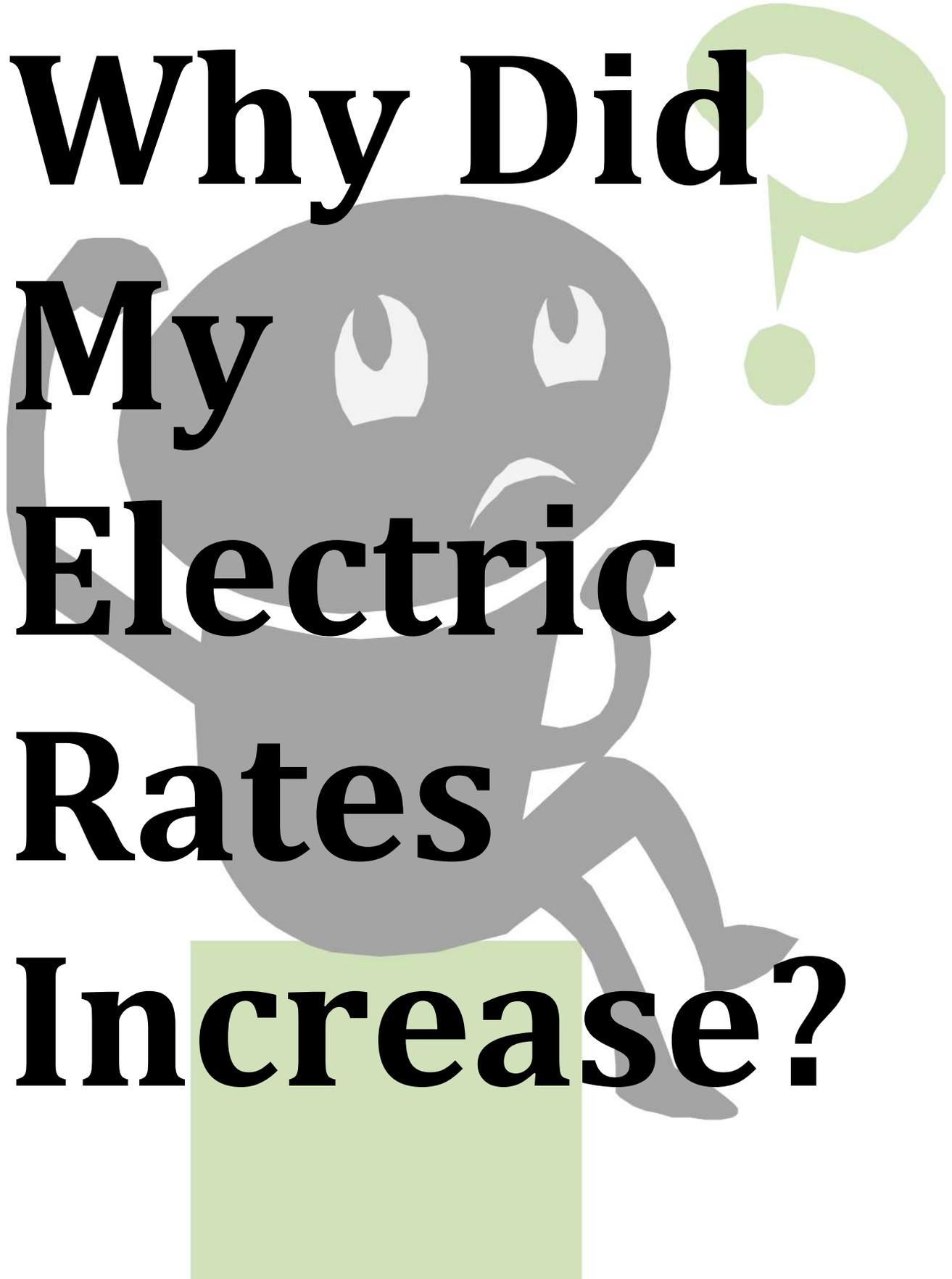


**Why Did  
My  
Electric  
Rates  
Increase?**

A cartoon character with a grey body and a large, round head. The character has wide, white eyes with black pupils and a small, downturned mouth, giving it a worried or confused expression. A large, light green question mark is positioned above the character's head. The character is standing on a light green rectangular base. The text "Why Did My Electric Rates Increase?" is overlaid on the character in a bold, black, sans-serif font.

Andrew Ross of NMPP was present to address concerns about the recent electric rate increase. He stated that there have been significant increases from NPPD that the City has absorbed without passing those increases on to their retail customers. Andrew Ross said, "Those increases have been compounded and have now looked like without any rate adjustments that the electric reserves would have been depleted in fiscal year 2015. To that end, it was the recommendation to increase the rates and the rates were established at a level to keep, basically start to catch up with, the wholesale rates from NPPD. The main focus that I want to get through here is that it is my responsibility to present information and facts, whether they are popular or not. There are a lot of things in the electric industry right now that are outside of local control. I touched upon a few of them last time I was here. Some of the main drivers are the global commodity demand for electricity. We are finding tremendous pressures as the price of steel, aluminum, coal, oil and all these things that are going up. We're battling for coal with China. If you think about that, that's crazy if you think that we get our coal from the Powder River basin in Wyoming and we're battling China for them. They are buying so much and they are building so many coal plants at a time that we are, as a federal government, heavily regulating fossil fuels. So, that's one of the principal drivers. It also extends into the transmission system. There is an enormous amount of transmission across this state, unfortunately, and fortunately, depending on your perspective, we cover a large land mass with a smaller population. So, that hits the department of roads in kind of the same manner. Lots of roads that need to be built over many, many miles and a small tax base to pay for it. The same type of principal applies in the electric market. We have miles and miles of transmission line and that transmission line is more expensive than you might think. One Fifteen KV, which you want to think about the arteries, the highway system of our electricity, that's about a million dollars per mile. And so, you start translating that and you have that system which was built basically, on the heels of our road system, in the 60's and that system is now aging and now we have to rebuild that system. You know, in Nebraska, we get extreme weather too, and the storm of, I think, 2007, wiped out about half of NPPD's transmission system. There are other great pressures. WAPA, which is the federal hydropower had extreme drought conditions in the late 2000's. In the late 2000's, the market had exploded. Since then it has tanked. I'll get into that in a minute. WAPA has these federal hydro allocations that it owes each town and there wasn't enough water to meet those obligations. So, they had to go out into the market and purchase that part power. Unfortunately, timing wise, that power was very expensive. The process known as hydraulic fracking has come around, which has absolutely cratered the natural gas portion. That has good ramifications and bad ramifications. The good ramifications are we're now an exporter of natural gas. We have an enormous abundance of natural gas that we did not have. In fact, they are burning it off, in cases, because it's getting in the way of their oil. It's so cheap now that they burn it off and get down to the oil. From the production standpoint, natural gas, which was one of the most expensive resources to produce, when those gas plants ran, that was terrible for NPPD. When the load was big enough, they had to run those, natural gas was \$12.00. It was not a good thing. Now, it's the complete opposite. Now, it's base load. They are running those plants all the time. Unfortunately, what that's done is, on the natural gas side, is absolutely crater the market. How does that affect David City? How does that affect my individual electric bill? N.P.P.D., your supplier, counts on more capacity than they do load. So, they count on selling that excess power to the market. When the market is good, your supplier, is essentially making money on their units and then passing that savings down to their customers. Now, with the market completely cratered, the gas is now under \$3.00, so it hasn't just halved, it's reduced by 75% - over 75%. So, as we shift and look at fuel sources and things like that, that might have some positive benefits, but right now it's kind of tough for coal producing states, along with the federal regulations that are being passed on. Right now, the Gerald Gentleman Station, which is the largest generating plant in Nebraska, consists of two coal-fired generating units. It is located in Sutherland, Nebraska,

which is just west of North Platte, if you know where that's at, produces half of the states' load and if mercury controls and other environmental controls come in, as they might be expected to, those would cost NPPD over a billion dollars. It would actually produce less electricity. So, there are enormous pressures on electricity. In the 90's and 2000's, prices remained stagnant for the most part. They didn't change much. I think there was some thought process. I think we kind of lulled some customers into thinking that was just the way it was going to be forever. I'm not doing my job if I'm not delivering the facts, even if it's bad news and the news is that we live in one of the cheapest electricity places in the entire world. Period. One of the four cheapest in the United States, the only places that are cheaper than the Powder River basin pole, are pockets of the Pacific northwest where they have hydropower like crazy – parts of Washington and Oregon, where they have lots of water. So, I know that's high level stuff, but, it impacts your electricity prices a heck of a lot more than I do, or your city council or the mayor or anybody else does. These are things that are outside of control. What we do have control of is our consumptive use, of what we actually use, but the trade pressures on this part of the country are tremendous. They are everywhere. Most places outside of the Midwest are already paying two and a half times on the coast of what it is in Nebraska. That's not just pressure on ourselves, but its pressure on irrigation, its pressure on industry. A lot of industry, like Kawasaki in Lincoln, and some other big job producers, come here because we have an educated work force and we have cheap electricity which is one of their biggest input costs. So, this is a really big deal and should warrant this kind of attention, whether it's positive or negative, I'm here to take it and to talk about it. But, ultimately, the main thing to come out of this is education and what we need to do is start looking at electricity as a commodity, as an input cost, like gasoline. I'm old enough to remember 89 cent gas and filling up my tank and things like that. We have just kind of had to adjust, in a very short period of time, to those price changes that's coming onto electricity and onto the heels of that, water and wastewater are under tremendous pressures as well. Both of those are very capital intensive industries that require large amounts of natural resources. When I first got into the industry I tried to make it a sugar coat and spin it somehow to make it positive but that's not doing anybody any good. The bottom line is that electricity prices are going up, no matter where you live, it just so happens that we live in one of the cheapest places, in the world, so that the percentages seem large. We are starting to catch up to other parts of the country. They're socializing transmission systems across the entire country. Nebraska is part of SPP (Southwest Power Pool). What that basically means is when you socialize transmission costs, when you socialize over areas, and you're the cheapest, essentially, what you're doing is averaging. You're trying to make everybody average, kind of pay the same kind of transmission costs. When you are currently the cheapest, and the entire country is socializing a major cost, what direction are you sucked towards. So, that the doom and gloom, if you will. That's just the facts of the pressure on the electric industry, specifically to David City. These are the reasons that I bring this up, because David City doesn't have control over how much water is in South Dakota. They don't have control over how much steel is being purchased in China. Traditionally, when you drill for oil, you drill vertically and you have to create a lot of wells to try to hit your pockets of oil. Now, they have the ability to drill down and then bore horizontally, setting off charges, which release enormous amounts of natural gas from the shale rock. So, these things that are happening, federal regulations, and things that are out of our control, are things that are impacting our state, our region, and our local communities. I did a little research, just so guys don't think that I'm too crazy. I see that in 2009 there was a recommended rate increase from Olsson Associates of around 11.3% that wasn't taken. And so, a few years removed now, we haven't taken that and the NPPD wholesale costs have increased and those margins continue to evaporate. So, it's good to have a rate consultant. It's good to have somebody taking a look at some of these things from the outside and locally so that you can keep up with rate increases instead of having these kind of rate spikes, these shocks. It should be based more on earning a net return on your system and it's a utility basis

of accounting versus cash basis of accounting. That's one of the primary drivers to move forward on this should be more keeping up with wholesale costs. Only 70% of your costs are from wholesale power. You have distribution costs, you have "a & g" costs, etc. but, you should then, be passing on through somewhat close to 70% or 75% of the wholesale costs that you get and that's the very simplified way. At least that keeps you up with your margins that can operate your utility. Because, eventually what happens if you're not financially solvent, as a utility, is that you are prime for someone to come in and take over your system. They just take over your distribution system and then they operate it. So, it's not meant to scare you, it's just the facts, it's what's happening. I know, primarily, some of the issues were on the electric heat customers. There are large residential electric heat customers in David City. This winter, raising it when we did, probably was a bit of a rate shock. Part of that was, the excess block of residential, was being grossly undercharged. Before, it was, 4.77 cents per kilowatt hour. That's cheaper than what electricity is being produced right now. So, that was a block that did need some attention because the first part of the study was the financial plan – how much of an increase did we need to keep our cash reserve targets, to make sure that we can run our business – because it is a business. It's a utility – it has costs and it has revenues. Once that level was set, it is how do we collect that increase now. That was one of the blocks that was not recovering the cost to serve that customer. Olsson Associates, in 2011, recommended on that block, a 77% rate increase. Two years ago, in February, they recommended taking that block to 7.75 cents. The new rates raised that to 7 cents. So, essentially, it's much closer in line to what it costs to serve that. It costs about 5 to 6 cents right now for that block. What you'll find on the other side of that is the increases on the summer months were grossly less than in that winter block. There's a global average, but there are winter months and there are summer months. Now, NPPD has seasonal rates. There's not as big of a discrepancy between the two as it was on the retail side. So, most of the increase was put on the winter months, especially on that block. So, if you are an electric heat residential user that uses a large amount of electricity, then, yes, that was one of the customers that was hit a little heavier in the winter months, but, then in the summer months, you'll see more in the 4 – 6% range on the same low side. So, that's the tee up and again I appreciate the opportunity to talk to you guys. I'd be happy to answer any questions at this time."

Dana Trowbridge said, "Andrew, from a pure production and distribution case, I have no arguments with what you told us today, but David City is not an example of a pure production and distribution case. We fund \$400,000 back into the general fund on an annual basis and charge it to the electric utility. I believe that we are paying for a City Administrator who hasn't been here for a couple of years. We own this building, and pay all of the costs attributed to it. Probably 15% of our electric expense including purchases goes somewhere other than pure electric generation and distribution costs. So, David City is a bit different. When I first read the article in the Banner Press, relative to your meeting with the council, I said to myself, maybe he doesn't understand how we do it here, but when I read that you were suggesting that we take \$400,000 from our reserves, for a rate stabilization program, I then knew that there may be some complicity because I think what we're doing is protecting our ability to bond \$500,000 because we can't match the 1.25 earnings to bonding rate that is in our current bond language. Is that fairly accurate?"

Andrew Ross said, "Well, what I can speak of is that there is three principal drivers and you spoke of one of them, to signal a rate increase, and one of the first ones is not only your wholesale supplier but other suppliers. That is the trigger, is the debt service coverage on any debt? Like I said, on a capital intensive industry, as a town you might have a new substation or a voltage upgrade that may cost a million dollars and it may cost more than that. Your wholesale supplier, like I just told you, could invest a billion dollars into something that doesn't

even produce more electricity for them. It just meets code, it basically meets the requirements. So, that driver is something that you need to have a rate increase. By the covenants of your bond, you have to cover that ratio on your net incomes. Most times that's a good practice anyway."

Dana Trowbridge said, "Generally, wouldn't it be better to deal with your expenditures before you get to that point."

Andrew Ross responded by saying, "Well, I think the main thing, and like I said, this is the first time coming in here, usually, as we go along we continue to isolate down, to get more down to cost of service. Primarily, right now, the key driver was, we've got to catch up to wholesale costs, especially, on the heels, if they have to spend this billion dollars. That's another 15% on the wholesale side.

Dana Trowbridge said, "Isn't their announced rate increase for the coming year 3.8%?"

Andrew Ross said, "Yes, 3.8%, and that has an asterisk so that does not include any environmental future legislation. It doesn't include one dime of the 2.5 billion dollars that they are going out for in transmission and production debt. They will be coming around to sign new contracts and so they can use that as collateral for the future bonds on those projects."

Dana Trowbridge said, "I think that's fairly standard for something of that nature."

Andrew Ross said, "The \$400,000, I don't necessarily know exactly where that number comes from. I have transfers, and, you're right, there are inherent costs, if there's street lighting that's not being charged for that should still be metered. These are things that we would get into as we go along with the study. This isn't a one time and done deal. Part of our study is that you come in and do a financial plan and you start getting rates where they need to be and then you start dissecting. You start allocating exactly how much of the electric utility funds are going to the general fund. One thing that I will say is, I do 65 studies over five states in five different utilities and David City is not different in that regard. The electric utility in almost every town that I do becomes somewhat of the cash sustainer for that town. Whether it's right or not, that is the reality that it is. Staff is usually covered sometimes by that and the buildings are sometimes owned by the utility. Everything that you spoke of is very common."

Dana Trowbridge stated that doesn't make it right.

Andrew Ross said, "This is a very tough political issue, but you try to separate and have the general fund recover and pay for what it has. The problem is the pressure on the property tax, one of the principal revenues for the general fund, is usually under a lot of pressure and therefore, it usually finds its way into the electric utility. But it's my job to start to separate that away."

Dana Trowbridge said, "That's what drove us to this somewhere around 12 to 14 years ago when the levy lid came. We were at 120 mills and the levy was 50. So, you go looking for a golden goose and we found it."

Andrew Ross said, "I can't speak to that."

Dana Trowbridge said, "No, I know you can't. But, the point that I'm making is that we have a retirement community. We have a community that has some substance but doesn't

have fantastic amounts of broad wealth and we have a lot of people that live on a social security check. \$17.05 per month doesn't seem like a lot to you, or if the average \$34.00 a month doesn't seem like a like to you but for a \$900 social security recipient it's a helluva lot of money and that's what we're going to be taking from them by December of 2013 versus February of 2011."

Andrew Ross said, "The main thing is, first off, it is a lot to me. I've got bills and I've got kids. Money is still money to me. Ultimately, these are national topics. This is not just David City. Personally, I'm a civil engineer by design. I'm a bit concerned about the civil infrastructures that built this country. We became a world power because we built roads that we could ship goods across the entire country. We became a national power by building the most sophisticated electric grid in the entire world. The issue now is other people are now doing that, China and Indonesia, they are building up their systems like gangbusters and they don't have the environmental controls. So, we are battling a world market right now and rebuilding our system and just like you spoke of, those costs are inherent on every single thing that you do. They are at your house and they are at your business. I remember, I was commuting from Lincoln to Columbus when gas did its run up to \$4.00 and I heard people say that it's so expensive to drive to the store. It's more expensive for my toothpaste because gasoline is inherent in every single product that we buy. It's an input cost. Electricity is the same way. Water is the same. We have become so accustomed to water being free. We don't really think of water too much. There might be some large industrial systems that think about water but on the residential side we don't think about water too much. We take it for granted. We walk 10' to the nearest potable water source and there is tremendous pressure on that as well. There are DEQ mandates going out sending millions of dollars to build new water plants and wastewater plants in towns smaller than this one where you have to spread that out over 500 meters. So, there's no other way to cut the pie. The infrastructure costs of this country are rising dramatically and those on fixed incomes is a big deal. I will not devalue that and I'm concerned about that moving forward because these people need to heat their homes and they need to do these types of things. Unfortunately, those pressures are not going away in at least the short to mid-term. I can't speak for outside of five years. I am concerned about that and I think that the main thing is to focus on what's inside of our control. I think that the main things that are inside our control are some of the things that you mentioned and moving forward we should look at some of those things. But, ultimately, on the consumptive side too. I did see some bills that were in the 6 - 8,000 kilowatt hours per month range. I don't personally have electric heat but I know, mostly, the average in the cold, cold, months are 2,500. So, I did notice some very large consumption. It's hard to say, throw on a sweater, and do that kind of stuff. That is something, as we go forward, in this country, we're going to have to pay a lot more attention to how much electricity and water we use. We used to be "go big and get flat screens." If you look at, let's say, the Hummer was five years ago and the Hummer graduated to the Prius. We're going to have to do that in our homes. We're going to have to do that and start thinking about these input costs because in Nebraska we are the last to feel it. Like I said, you're paying on an average maybe 9 or 10 cents per kilowatt hour. You go to other places like Texas or the east coast or the west coast or you go anywhere outside of the Midwest and Pacific Northwest and they are paying 50 to 100 to 150% more than that now.

Janis Cameron asked, "Why, on the residential electric in David City, why do those that use more pay less per kilowatt hour than those that conserve? Is that normal too and why?"

Andrew Ross said, "It's an incremental increase. That is normal. The cost of service should have a declining block and it seems weird. Wait a minute, as you use more, you should pay more and, traditionally, the only reason that you do that is to send price signals to make

people use less. Studies have shown that it's taken three times the price point to actually get people to change their behavior. Just like gasoline, a lot of us were worried about it but it takes a lot to get people to change their life style on the gas side. It's the same thing with electricity. But, what happens is that you have these capital costs that you have to pay no matter what. So, you have the iron in the ground, the power plants, all the steel for the transmission system, this whole thing built out. That's the reason that you have a customer charge because even if you don't use one kilowatt hour, you have a meter at your house, you have the ability to serve and so you have a lot of these inherent costs. As you move down the list, as you use more electricity, the cost becomes less and less, you've got that global covering your fixed costs and your marginal cost then become less expensive. It's a load factor issue. It gets a little mathematical but, ultimately, from an economic perspective, it's a marginal expense. The marginal expense as you use more kilowatt hours, actually goes down as you move outside of the fixed costs that you have to pay no matter what. So, if you use one kilowatt hour, that's going to be an expensive kilowatt hour because you've got to pay for the power plant, the transmission system, etc. Now, it's got a curve on the other end as well. As a country, we use plants in a hierarchy system. The lowest cost to the highest cost and that's kind of changing right now, like I told you on natural gas. It was nuclear, hydro, coal, then some natural gas peakers, then some diesel generators on the way up. Now, natural gas is starting to fall into being price competitive with coal, etc. But then, what I'm saying is, if you use too much electricity then what happens is you start to burn up and get into those more expensive units. Diesel, for example, twenty years ago that might have been a very economical resource and forty years ago it definitely was. Now, not at all. So, you have to serve that load. I don't know any other industries, when you see incentive programs and such, and if you think about that from a business model, it's kind of backwards. The electric utility is paying somebody to use less of their product. I don't know any other industry that does that, other than maybe water. But their reason is, there is an obligation to serve. You can't turn people away. On a hot day, you can't put up a sign that says – Out of Electrons. It's got to be there. People depend on it. So, what happens is, if you start stretching your system either on the transmission side or the generation side, then you either have to go build a new power plant or upgrade the voltage of your town, or upgrade the voltage of your transmission system, which are enormously expensive things. So, if you can convince your load to actually use less or use it at different times, then it actually offsets that future expense and you don't have to build that plant or you don't have to do those more expensive items and actually it saves everybody money. So, that's the main thing and I know it's an uphill battle trying to get kind of education through, but it is really a focus on consumption over rate. Globally, that rate is kind of outside of David City's control. The consumption that you use is not, and that is one of the things as we move to more efficient things such as insulating, caulking windows, these types of things will become more and more valuable. They weren't valuable before because there wasn't a big cost. Electricity and water and these things weren't a big cost. But, if water is four times, five times, ten times more expensive in five to ten years, then you are going to pay attention to your showers and to your kids brushing their teeth and those types of things and that's where we're getting with electricity. That's why I'm not a very popular person."

Dana Trowbridge said, "I think that you've sent a wonderful message this evening and I hope the Council and the Mayor have been listening closely. There are a lot of things coming and we've got to take this \$400,000 boondoggle and we've got to squeeze it down as small as we can absolutely get it because that's what's going to affect the little old ladies in a cold dark house."

Andrew Ross said, "I appreciate that message and I think the main thing is education. It's going to have to be everybody working together getting out those messages and going

through that little old lady's house and determining where there's losses, where there's dramatic dollars just going out, literally, the window or the door and teaching them what's going on in the industry, and what's going on in these costs, is going to be big. On the business side too, business owners have these costs as well. For the most part, I bet you they run pretty tight budgets and pretty good businesses and that's one cost that every single one of them pays. Every single one. So, that gets passed down in much more ways than just the little old lady across the street. It is a worldwide total economy shift."

Dana Trowbridge said, "Is LES a very low cost producer and distributor? Lincoln Electric is about 31% less than we are."

Andrew Ross said, "LES has some advantages and they also ran into some fortunate scenarios. I know, last year, they had an outage that was just at a perfect time because a couple years removed they had their 9% increase. The other thing about Lincoln – Lincoln's doing pretty good right now as far as their coffers and things like that and so, like you mentioned, there's not as much cross between the two."

Dana Trowbridge said, "I think there's a definite separation there."

Andrew Ross said, "It is one retail customer, they own some generation, and it's an entirely different animal than David City is. David City has their power supplier and essentially it's run through the distribution system and David City isn't involved too much on the power supply side."

Chris Wegner, from Rose Motel, asked Andrew Ross what percentage were the increases for the residential and business customers.

Andrew Ross said, "The global increase was 13.9%. So, 13.9% was the overall increase. At equal load, David City will collect 13.9% more in revenue. That's the financial plan side of it. How much more revenue does David City need to operate its electric utility?"

Dana Trowbridge said, "So that's around another \$400,000 because we bill out 3 million a year at 14% is \$420,000."

Andrew Ross said, "The key driver again is over the last ten years the wholesale costs have gone up 79% and retail costs have gone up about 40%, globally, on all customers over that time period in David City and the 79% is for all of NPPD's wholesale customers and other power suppliers have seen the same increases."

It was noted that the new "smart meters" also minimize David City's losses because they pick up everything that is plugged in where the old meters did not.

Andrew Ross made note that David City's reserves should be 1 – 3% for storm contingency.

The mayor and council thanked Andrew Ross for coming out and making his presentation.