| PROGRAM COMMITTEE NAME:        | Electrical Lineman  |  |
|--------------------------------|---|--|
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| CHAIRPERSON:                   | Lindy Forrester   | 1  |
| MEETING DATE: 11/15/10         | MEETING TIME: 12:30 pm  | MEETING PLACE: Amarillo College East     |
| RECORDER:                      |   | PREVIOUS MEETING:                        |
| Paula Badger                   |   | 11/01/10                                 |
| MEMBERS PRESENT:               |   | OTHERS PRESENT:                          |
| NAME AND TITLE                 | Employer Info   | Email and Phone                          |
| Ron Faulkner                   | Amarillo College  | 371-5930 rlfaulkner@actx.edu             |
| Byron Logue                    | American Site Builders  | _679-2366 byron@americansitebuilders.com |
| Paul Salazar                   | West TX Electric  | 372-1531 psalazar@hotmail.com            |
| Jim Woodard                    | Xcel Energy   | 457-6205 james.c.woodard@xcel.com        |
| John Gill                      | IBEW 602  | 676-0742 jgill@ibew602.org               |
| Joe Mihm                       | IBEW 602  | 886-3871 jmihm@ibew602.org               |
| Jerry Moore                    | IBEW 602  | 676-0740 jmoore@ibew602.org              |
| Art Schneider                  | Amarillo College  | 371-5089 aschneider@actx.edu             |
| Ed Nolte                       | Amarillo College  | 335-4277 elnolte@actx.edu                |
| Anne Nail                      | Amarillo College  | 371- 5265 ahnail@actx.edu                |
| Marvin Rodriguez               | Irby  | 661-4234 mrodriguez@irby.com             |
| Chuck Parks                    | AAA Electric  | 622-8430 chuck@aaaelectrictx.com         |
| Lyndy Forrester                | Amarillo Economics Dev. Corp  | 379-6411 lyndy@amarilloedc.com           |
| Andy Stewart                   | Swisher Electric Coop   | 995-3567 astewart@swisherelectric.org    |
| Agenda Item                    | Action/Discussion/Information   | Responsibility                           |
| Old Business:                  |   |  |
| Oklahoma State                 | Curriculum/Enrollment   | Ed                                       |
| Edison Electric Institute test | Copy of test  | Xcel                                     |
| Continuing Business:           |   |  |
| Program                        | Proceed with plans for an<br>Electrical Lineman Program   | Ed                                       |
| New Business:                  |   |  |
| Program competencies           |   |  |
| Curriculum Decisions:          | Proceed with the program  | Ed                                       |
| ·· ·· ·                        |   |  |
| Other:                         |   |  |
| MINUTES:                       |   |  |
| Key Discussion Points          | Discussion  |  |
| Old business:                  |   |  |
| Oklahoma State                 | Shawn - OSU very cooperative in providing their material. Ed was able to put together sample class rotation with what a 42 hour program would look like modeling after OSU. OSU also provided their enrollment figures beginning in 1999 and 2000 enrollment is what we are hoping to start with 12 to 15 students. |  |

|            | Lyndy – One of the successes of the OSU program was that they did have a coop and on the job experience instead of just coming out of school and having hands on experience. It was decided we need to rely on community partnerships to make this happen.<br>Shawn – suggest not looking at it as a workload but as a coop or practicum as a learning experience and not focus on we've got extra work we need extra hand it's not really what a coop or an internship is designed to do, it is an extension of the classroom, but they have some knowledge so they can be useful in the field, but not to be a field worker. It's more like a learning experience  |  |
|------------|--|--|
| Curriculum | <ul> <li>Ed – Program is 18 months. We plan on going during summer. They could start working and do the practicum at the same time. The pre-requisite will be a CDL license and a climb test before the student can begin the program. This is a 42 credit hour program where OSU's is 60 credit hours. than actual</li> <li>Shawn – please look through these competencies. Right now we are looking at the foundation. The next few months as we build the program. They will increase added classes.</li> <li>Ed - Look at the certificate sheet these are our existing courses outlined in black. These are all the same courses for our industrial programs. The new classes are outlined in red. These will be lineman specific. The first 8 weeks, Orientation &amp; Line Skills Fundamentals, is where we will do more climbing techniques. Climb test will be first; to be sure they can do heights then train on 40 ft poles and the towers to learn to navigate around specific wires and transformers. The program is built on competences some classes may go to 4 hours if needed.</li> <li>John – Is this just a pre requisite to get into the XCEL's lineman program or is this a two year program to certify them as a lineman?</li> <li>Ed - this is not replacing a full apprenticeship. This is a pre-apprenticeship Marvin – this will not get you a journeyman's license?</li> <li>Ed - no</li> <li>Jim – curious about the climbing part of it. How are you going to approach that? Because we have gotten some lineman that have gone through a program and we have to start all over.</li> <li>Ed – there are several ways we can look at this. We are now looking at getting a tower 80 ft tall and put them up there. That's what the pre requisite will be implay and we have to start all over.</li> <li>Ed – there are several ways we can look at this. We are now looking at getting an actual wind tunnel tower which we are now looking to get in place on campus</li> <li>Marvin – you will need a few wood poles</li> <li>Ed – we me getting an actual wind tunnel tower which we are now look</li></ul> |  |
|            | Ed - We are looking at developing those to support the curriculum the classes will have lectures and labs what you are learning you will be able to  |  |

demonstrate. Lyndy – what is missing from the curriculum that Ed has put together? John – this is something to start with. There are always things that will need to be tweaked. It just comes with time. Shawn- our benefit with the WECM curriculum, it cannot be reduced but he can add as much as he wants to. Nothing can be removed from this foundation because the state says this has to be part of it, but when you come back and say we need a little more of this and a little more of that, Ed can add, just can't take away Joe – are the motor controls set in stone? Ed - no Ed – understanding relay logic is what motor control is all about. Jerry – we would want them to understand compositors and transformers, regulators, re-closures Jerry – transformers would play an extremely big part of it, transformers would replace motor control. I'm not say control theory you could have some but you need actually hands on for transformers versus the motors because these lineman are not going to be out here wiring up motors. That is going to fall more in line of inside type wireman. That is an un-needed skill Jerry – is there any ditch safety in the underground? Ed - as far as excavation and shoring? We do not have anything in there Jerry – it wouldn't hurt because OSHA that is one of their serious things. Ed – not in this particular class. CLASS # 1307 We do not go into the shoring It is our general safety class. See that environmental safety and health that is for all students. It will go for all environmental health so it is a general safety requirement. We can add that into the curriculum with no problem. If we are looking a specifics on type of shoring that needs to go on in depth and width. Marvin – we do a lot of excavation work and what we are required to have on site is a competent person. This is the level of training you would like them to be exposed to as it relates to ditching and open holes, some underground exposure. Jerry – sub-station upgrades, there are some real scary things that can happen out there when you are digging in the ground and there are a bunch of wires Ed – if we do underground distribution systems where can we excavation shoring in. in motor controls we need to have some control theory but actual motor controls we could slide that down

John – substation does, who's to say if they have a little bit of schooling they are not going to apply for a substation job

Marvin – I say put it in, coops have their lineman, substations, relays they got to understand all that

Jim – system operations we do need

Ed-I have transformers up here under subtopics, distribution transmission, of got transformers right there I can add regulators, re-closures, and cover that in that particular class area.

Marvin- you have a long way to go to decide just how much to put in each class. This is good but in some classes you are going to need more time

| Continuing Business:       |   |              |  |
|----------------------------|---|--------------|--|
|                            |   |              |  |
| New Business:<br>Equipment | Shawn – one thing that will help us if your organization is replacing<br>equipment that would be beneficial teaching aids. When you talk about state<br>fundingthere is not a lot of grant money. Some programs are very attractive<br>and you get lots and lots of grant money. This is a high demand program<br>because of the grain workforce across the nation but there is not a lot of<br>grant money going into it. If in your industries you have an opportunity to<br>talk about this and you are taking this piece of equipment out of service. AC<br>could use it as a teaching aid, we would love it. A lot of our programs are<br>built around industry support, things that they are replacing they will donate<br>to AC to provide of the teaching aids.<br>Our grant department has been working; they have been involved in this.<br>They have yet to find any substantial grants. They can find \$2500 here and<br>there which will not go very far. This is an equipment intensive program, if<br>you are retiring things from service or a conversation with someonedon't<br>throw that away, I'm on a committee at AC and we need that. This is your |              |  |
|                            | program.<br>Chuck – my company hauls of tons of used nuts and bolts, used cross arms<br>and braces  |              |  |
|                            |   |              |  |
| Curriculum Decisions:      | Lyndy –Do we have a motion and 2 <sup>nd</sup> to put this program into place so AC can<br>proceed to start.<br>John made the motion and Jerry 2 <sup>nd</sup> the motion.  |              |  |
| Other:                     |   |              |  |
| CHAIRPERSON SIGNATURE:     | DATE  | NEXT MEETING |  |
|                            |   |              |  |