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Advantages of alternative energy sources in today's electrical industry

It's 2015 and Governments, corporations and people around the world are realizing the importance of using alternative energy sources. In recent years, billions have been spent to lower our reliance on coal and other unhealthy energy sources. Coal remains the leader in the production of electricity, but other technologies are harnessing natural sources to provide "clean" power. This pollution-free energy production brings many obvious advantages to our world. Those of us in the electrical industry will not only get to benefit from the environmental improvements in the next few decades, but we get to be an integral part in building the infrastructure!

Electric Utilities have the huge responsibility of meeting the power demand while following ever-increasing government rules. Clean energy is the thing of the future and legislation will continue to be passed down which limits the amount of pollution allowed in energy production. Alternative energy sources such as wind farms and solar arrays will allow the Utilities to abide by these rules. Changing the way things have been done for a hundred years isn't always a bad thing. Increasing research and technology will allow clean energy production to be more and more affordable and the cost is mostly up front! There is no gas or oil to be burned and the free natural resources will no doubt eventually bring our electricity prices down (*wink). A price decrease would be unlikely, but the energy customer will know that their money is being spent on power that comes from our own earth's resources.

Linemen are constantly at work updating old power lines to keep up with today's demand. They get a lot of overtime when mother nature takes down power lines. Often times those catastrophes that put people out of power are the perfect opportunity to update the infrastructure in that area. The clean energy movement will provide a lot of work for these guys/gals. Wind farms and solar panels don't always produce electricity since the sun goes down and the wind

isn't always present. The grid will need to be updated in future years to be able to more efficiently distribute the green power. There may also need to be a way to store this energy when it's in surplus. The linemen will be the builders/maintainers of this improved national infrastructure.

Electrical Contractors are building the miles of wind farms that you see on a country road and the shiny solar arrays atop buildings and homes. The NECA shops that are able to take on tasks this large are able to take part in a money-making opportunity that will change the world. The wind turbine is an impressive feat of engineering that could only be installed by those qualified to do so. Photovoltaics are also not just something Joe homeowner could take on by himself. I believe that electrical contractors can count on years of recurring business from utilities and municipalities who must invest in clean energy. More and more homeowners will install solar arrays that are interactive with the utility grid. Contractors will be responsible for making sure the surplus from thousands of solar customers efficiently makes it back to the grid for the utility to redistribute it. This energy revolution is not going away anytime soon and the contractors who are able to fill that niche will benefit more and more. I believe that clean energy installation is something that will eventually be done by almost every Union shop as the demand increases.

The IBEW electrical worker will also benefit from the increase in alternative energy sources. We are the ones with feet on the ground who must piece these things together with a good Attitude, Skill and Knowledge. Pride is a necessity for the Journeyman worker and the mammoth wind turbine or cool-looking solar array will be an easily-visible picture of our pride. I take pride in a skillful pipe run, but I think any of us enjoy pointing out our handiwork to friends or family. As more and more Wind farms and solar arrays are built we will have a steady flow of work that will help to keep many of us employed. We may all have solar arrays on the top of our houses 10 years from now! Who's going to install those other than IBEW workers alongside NECA contractors?

The National Renewable Energy Laboratory's Renewable Electricity Futures Study estimated that the USA could be at 80% alternative energy use by 2050. This seems attainable, but it won't come without continuing efforts to convert away from coal and nuclear power. The most recent numbers from 2014 by the US Energy Information Administration said that 14.3% of net US power was produced by these renewable sources: Hydropower, Biomass energy,

Geothermal, Solar and Wind. That's a huge number considering that our economy is the 2nd biggest user of electricity in the world and that we account for 20% of the world's generation capacity. It will be exciting in our lifetimes to see how far clean energy takes us.