

Testimony of John E. McGarry before the Members of the Senate and  
Technology Committee re SB 438 S-1.

Chairman Nofs and Honorable Members of the Senate Energy Committee:

### **Introduction**

My name is John McGarry. I am retired intellectual property lawyer. I have an undergraduate engineering degree and have spent my professional life of over 50 years with matters at the intersection of technology and law. I now use my technology and legal talents on the issues that affect climate change. I believe that climate change and the abatement of the affects of climate change is a seminal issue of my generation.

Senate Bill 438 is very important not only to me but the people of Michigan because of its implication of climate change. Forty percent of carbon dioxide generated in the US is generated by power plants. The Environmental Protection Agency (EPA) has drafted a Clean Power Plan for the country and has given the states the right to select their own plan for meeting the carbon dioxide emission reduction by 2032. Governor Snyder has just announced that he will implement the Clean Power Plan here in Michigan. I believe that SB 438 should reflect Michigan's plan to meet Michigan's required carbon dioxide reduction under the EPA Clean Power plan

### **The Renewable Energy Standard**

Michigan has made great strides in developing renewable energy as a result of the Renewable Energy Standard which has been in effect for several years. This renewable energy standard has been eliminated in SB 438. This is very unfortunate.

It appears to me that a renewable energy standard must be in place to meet the Michigan's EPA clean power plan. Renewable energy will be the road to meeting Michigan's EPA clean power plan. It has worked over the time that it has been in place over the last few years. I do not believe that renewable energy will be increased without a new, expanded standard.

Now that the 10% renewable has been met, there is a need to boost the renewable energy to 20% or higher. People with far more experience in the power generation field believe that there is no doubt that it can be done. For example Germany started with clean power in a program of 2001 and reached 27% by 2013??

I believe that SB 438 should be amended to include a renewable energy standard and that that standard should be at least 20% by 2020.

## **Net Metering**

Senate Bill 438 is counterproductive in reducing carbon dioxide and power cost reduction. The use of roof top electro-voltaic (EV) power systems will reduce the peak energy requirements for utilities and therefore lower the cost of energy. Solar energy is generated by sunlight falling on rooftops with these EV systems when energy demand is the highest in summer. Net metering under the bill is counterproductive. The bill requires EV generators to pay the full retail price to utilities for all power that it uses and gets credit for excess that it produces at wholesale prices. Under these conditions, very few, if any, homeowners will pay the full cost of solar panels on the roof and the maintenance for them with a no-win return from the power companies.

Senate Bill 438 should be amended to pay a fair price for the energy generated by rooftop power systems to the grid. That is, not retail rate but the retail rate less some number that reflects the value of the grid. Senate Bill 438 should also be amended to provide for time of day pricing to outgoing and incoming energy for the EV power generators.

## **Externalized Costs**

### Health care, life impairment and premature deaths resulting from fossil fuel burning.

Michigan utilities do not account for the full cost (“externalities”) of the production and combustion of fossil fuels. The pollutants from fossil fuel power generation pollutants are linked to increased rates of heart disease, childhood asthma, lung disease, chronic bronchitis, restricted activity days and premature death. The Michigan-specific health-related damages associated with PM2.5 emissions from nine Michigan coal-fired facilities was estimated in 2011 to be \$1.5 billion annually and the national impacts from those same facilities to \$5.4 billion annually. See <http://environmentalcouncil.org/mecReports/PublicHealthImpactsofOldCoal-FiredPowerPlantsinMichigan.pdf>.

The power companies with the tacit approval of the legislature receives a subsidy in that the full cost of power generation is not borne by the ratepayers but rather by the people whose health is impaired or life shortened by power generation in their back yard. Not surprisingly, the burden does not fall on most of the customers but rather by those who live in the vicinity of the plants. It is the poor who bear the burden of the health impairment and shortened life from the power generation. The cost of fossil fuel combustion pollutants has been borne by the poor.

Pope Francis makes this point succinctly in his *Laudato Si'* on a macro scale. But his point is also applicable to fossil fuel, notably coal, power generation in this country, and in the state of Michigan. Our libertarian instincts in our capitalist society are offended by this blatant subsidy paid for in the health care of our less fortunate citizens. Until the external costs of fossil fuel combustion are monetized and brought into the market, the cost of fossil fuel generation is not equitably borne by ratepayers.

Senate Bill 438 should be amended to bring into the rate base the best estimate of the health care costs of these pollutants and the amounts collected should be used to pay the health care costs of those affected by the pollutants.

Respectfully submitted,

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