## **Health Professionals for a Healthy Climate**

http://www.hpforhc.org

RE: Docket #15-21

August 9, 2016

Minnesota Public Utilities Commission 121 7th Place East, Suite 350 Saint Paul, MN 55101-2147

Dear Commissioners:

We are Health Professionals for a Healthy Climate, a growing organization of Minnesota doctors, nurses and allied health professionals. As such, we are writing to encourage the Minnesota Public Utilities Commission to approve Xcel Energy's updated 2015 resource plan to retire coal burning at Sherco Units 1 and 2 in 2023 and 2026 respectively and accelerate the buildout of solar and wind facilities.

Xcel's plan would cut carbon emissions by 60 percent by 2030, which follows the science based recommendations for reductions in greenhouse gas emissions from these plants for the levels of global warming pollution reductions needed across our economy.

Xcel's plan will help us to accomplish several important health related goals for of Minnesotans. These include: (a) Reduction of coal pollution; (b) Participation in limiting climate change; and (c) Improvements in the state economy. We will discuss these goals briefly below:

(a) Coal burning power plants are responsible for the release of a dangerous mix of toxic substances including mercury, nitrogen and sulfur oxides (smog and ground level ozone), chromium, volatile organic compounds, and microparticulates dangerous to the heart and lungs. Locally and globally, coal combustion is a significant contributor to such major health problems as lung diseases, congestive heart failure, heart attacks, stroke, neurological damage, and asthma. As well, coal mining inflicts a burden of illness upon miners' health. Transporting coal by train distributes harmful coal dust along railroad routes. And, disposing coal ash is a threat to water and soil quality.

By some estimates, annual U.S. coal emissions are responsible for about 24,000 premature deaths, 38,000 heart attacks, 550,000 asthma attacks, 22,000 hospital

admissions, 26,000 emergency department visits, and over three million lost work days (note 1).

(b) Closing coal plants is an important step in mitigating and adapting to climate change. In Minnesota, global warming is causing a wide range of threats to human health, including more heat waves, extreme storms and flooding, drought, worsening air and water pollution, accelerated spread of vector borne diseases (e.g. Lyme Disease, Zika, etc.), reduced crop production, and higher rates of developmental disorders. Without achieving substantial mitigation and adaptation, projections are for progressively more severe health impacts over the next three to five decades (note 2).

Closing Sherco coal Units 1 & 2 will demonstrate Minnesota's strong commitment to meeting overall U.S. commitments under the international COP 21 climate agreements.

(C) By further diversifying our energy portfolio with modern wind and solar, we can do much to secure Minnesotans' access to clean safe power. Clean, reliable, less expensive, renewable energy sources help support the mission of Minnesota health care and health technology companies.

We are grateful to the MN PUC for its important role in protecting our environment while securing the power needed for today and tomorrow.

Respectfully Yours,

Health Professionals for a Healthy Climate

## **NOTES**

- 1. Alan Lockwood. 2012. The Silent Epidemic: Coal and the Hidden Threat to Health. MIT Press. For a summary, see "Coal Fired Power Plants" at <a href="http://www.psr.org/assets/pdfs/coal-fired-power-plants.pdf">http://www.psr.org/assets/pdfs/coal-fired-power-plants.pdf</a>
- 2. USGCRP. 2016. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Crimmins, A., J. Balbus, J.L. Gamble, C.B. Beard, and others, eds. U.S. Global Change Research Program, Washington, DC. At: <a href="http://dx.doi.org/10.7930/J0R49NQX">http://dx.doi.org/10.7930/J0R49NQX</a> See also: Minnesota Department of Health. 2015. Minnesota Climate and Health Profile Report 2015. Saint Paul. At: <a href="http://www.health.state.mn.us/divs/climatechange/docs/mnprofile2015.pdf">http://www.health.state.mn.us/divs/climatechange/docs/mnprofile2015.pdf</a>