December 18, 2015

Terry L. O'Clair, P.E.
Director
North Dakota Department of Health
Division of Air Quality
918 E. Divide Ave.
Bismarck, North Dakota 58501-1947
VIA EMAIL *to* airquality@nd.gov

Re: North Dakota Department of Health 111(d) Plan Development

Director O'Clair,

On behalf of the Midwest Energy Efficiency Alliance ("MEEA"), I am pleased to submit to the North Dakota Department of Health ("Department") the enclosed comments on the development of North Dakota's 111(d) State Plan. MEEA is a membership organization of state and local governments, energy utilities, research institutes, manufacturers, energy service providers and advocacy organizations working to advance energy efficiency in North Dakota, South Dakota, Kansas, Nebraska, Minnesota, Iowa, Missouri, Wisconsin, Illinois, Michigan, Indiana, Ohio, and Kentucky. MEEA works collaboratively with all stakeholders to support programs, policies, education and training initiatives, and emerging technologies that have produced significant energy efficiency investment, energy and cost savings, economic growth, and enhanced environmental preservation across the Midwest.

MEEA submits these comments to the Department in response to the Department's solicitation of comments related to the development of a state plan in compliance with the U.S. Environmental Protection Agency's ("EPA") final Clean Power Plan ("CPP"). 80 Fed. Reg. 64661-65120, Oct. 23, 2015 (amending 40 C.F.R. §§ 60.5700-60.5880, effective December 22, 2015). Specifically, MEEA recommends that North Dakota take the following actions:

- *Commission a study of the potential for energy efficiency savings to quantify the size of the energy efficiency resource in the state, and consider the energy, economic, and societal benefits of adopting an Energy Efficiency Resource Standard;*

- *Commission a study of the potential for energy savings from building energy code adoption and enforcement, and consider the energy, economic, and other societal benefits of adopting statewide building energy codes for residential and commercial construction;*

- *Collaborate with industrial customers and trade groups to explore the potential for capturing energy savings from energy efficiency in the industrial sector;*

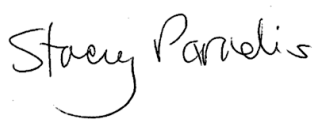
- *Pursue low-cost financing options to expand customer-funded energy efficiency projects through efforts already enabled by statute, such as Energy Savings Performance*

Contracting (ESPC), or new means such as Property Assessed Clean Energy (PACE) or On-Bill Financing (OBF).

Our comments reflect the views of MEEA, and not the views of the organization's members or individual entities represented on our board of directors. MEEA's focus and area of expertise is in the delivery of energy efficiency through ratepayer-funded programs. Our comments leverage our deep and long-standing experience in this sub-sector of the energy efficiency industry. MEEA emphasizes, however, that we are supportive of the inclusion of other energy efficiency delivery mechanisms under a state compliance plan – including building codes and privately-funded and federal programs – and have incorporated recommendations to that effect in our comments below.

MEEA looks forward to continuing to collaborate with the Department and North Dakota stakeholders to chart a path forward for energy efficiency as a core element of the state's compliance plan. Please do not hesitate to reach out if we can be of further assistance.

Respectfully submitted,



Stacey Paradis
Executive Director, Midwest Energy Efficiency Alliance

I. Background

Energy efficiency means "providing the same or better level of service or production while reducing the energy consumption and costs to operate electric appliances, heating and cooling systems, or entire building envelopes."[1] Energy efficiency produces a number of benefits to customers, electricity providers, government agencies, and society, including: reducing customer bills, reducing the risks associated with fossil fuels and price instability, increasing energy independence, improving electric system reliability, reducing the stress on local transmission and distribution systems, deferring the need for expensive transmission and distribution system upgrades in addition to delaying the need to build new power plants, reducing emissions associated with power generation, reducing health impacts resulting from the power sector, and promoting local economic development and job creation by increasing the disposable income of citizens and making businesses and industries more competitive.[2]

MEEA's recommendations below are aimed at helping the state of North Dakota explore strategies to expand opportunities for energy efficiency in the state, and thereby realize energy and cost savings, non-energy benefits, and a low-cost pathway to compliance with the Clean Power Plan.

II. An Energy Efficiency Resource Standard can generate low-cost energy savings and emission reductions, and lead to significant job growth in North Dakota.

An energy efficiency resource standard ("EERS", also known as an Energy Efficiency Portfolio Standard or "EEPS") is a state policy that allows utilities to invest in energy efficiency to meet a portion of their customers' energy demand rather than through supply-side resources. Looking across the Midwest, some states' EERS applies to all utilities within the state, while in others its applicability is limited to those regulated by the state commission or those larger than a particular size. The policy is often adopted through legislation and then implemented by the state utility regulatory body, although in some states an EERS is established solely through utility regulations. The use of an EERS to require ratepayer-funded investments in energy efficiency provides a stable funding base for energy efficiency programs and can fuel long-term energy savings. An EERS also creates a stable policy and regulatory environment, which is vitally important to developing the energy efficiency industry (and associated jobs) within a state. In contrast, those states that rely on other long-term energy planning policies and processes (such as integrated resource planning) to advance energy efficiency achieve far lower levels of energy savings. Figure 1 and Table 1 below illustrate the impacts of EERS in several Midwestern states.

[1] James, C., Takahashi, K. and Steinhurst, W. Synapse Energy Economics, Inc. North Dakota Energy Efficiency Potential Study Report. December 1, 2009.
[2] Id.

Figure 1: Comparison of Energy Savings Across the Midwest[3]

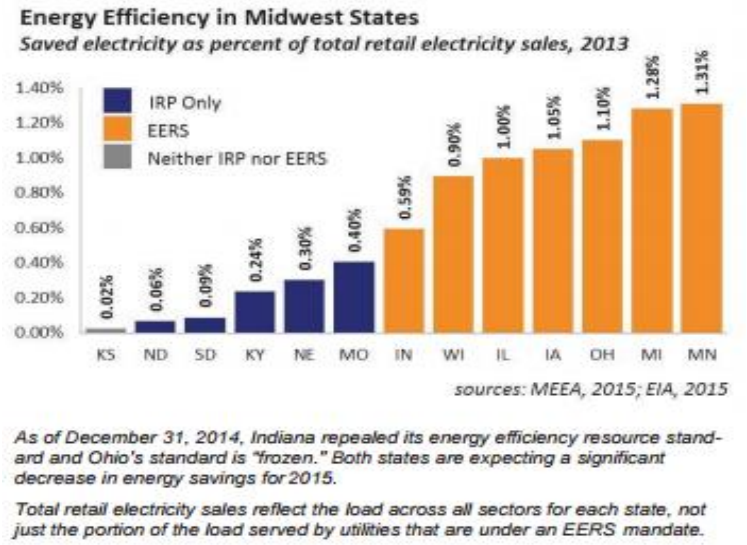


Table 1: Impacts of Energy Efficiency Resource Standards Applicable to the Electric Sector

State	Targets	Authorizing Legislation or Regulation	EE Spending in 2013	Energy Saved Through EE in 2013	Return on Investment[4]
Illinois	Legislative targets of 0.2% incremental savings starting in 2008, ramping up to 2% in 2015 and thereafter. Annual peak demand reduction of 0.1% through 2018.	*Legislation:* S.B. 1918 Public Act 96-0033 220 ILCS 5/8-103 *Regulation:* ICC Case No. 13-0495 ICC Case No. 13-0498	$220M	1400 GWh	**$2.26 in benefits** for every $1 invested in energy efficiency in 2012.[5]
Iowa	Incremental savings targets varying by utility, from 1.1-1.2% annually through 2018.	*Legislation:* S.B. 2386 Iowa Code § 476 *Regulation:* IUB Docket EEP-2012-0001.	$160M	490 GWh	**$1.56-$3.49 in benefits** for every $1 invested in energy efficiency in 2012-2013.

[3] MEEA, 2015; EIA, 2015.

[4] Benefits of an EERS are typically measured in terms of the avoided utility costs of energy and investments in new transmission and distribution infrastructure. These do not take into account health, environmental, employee productivity, jobs, or other non-energy benefits of EERS.

[5] This refers specifically to the benefits generated by and investment in energy efficiency programs administered by the Illinois Department of Commerce and Economic Opportunity, which administers 25% of energy efficiency funding in the state of Illinois.

Indiana (repealed in 2014)[6]	2% reduction of utility electric sales by 2019.	*Regulation:* IURC Phase II Order, Cuase No. 42693	$95M	625 GWh	**$3.02 in benefits** for every $1 invested in energy efficiency between 2012 and 2013.
Michigan	0.3% incremental savings in 2009, ramping up to 1% in 2012 and each year thereafter	*Legislation:* Act 295 of 2008	$172M	1320 GWh	**$4.38 in benefits** for every $1 invested in energy efficiency in 2013.
Minnesota	1.5% incremental savings in 2010 and each year thereafter.	*Legislation:* Minn. Stat. § 216B.241	$143M	900 GWh	**$4.00-$4.30 in benefits** for each $1 invested in energy efficiency between 2008 and 2013.
Missouri	Voluntary goals for electric utilities, including 0.3% incremental annual energy savings in 2012, ramping up annually to 0.9% in 2015 and 1.7% in 2019 for cumulative annual energy savings of 9.9% by 2020.	*Legislation:* Missouri Energy Investment Act, 2009 SB 376 *Regulation:* 4 CSR 240-20.094(2)(A)	$55M	337 GWh	Data not available
Ohio[7]	Beginning in 2009, incremental savings of 0.3% per year, ramping up to 1% in 2014.	*Legislation*: S.B. 221	$222M	1656 GWh	**$1.80-$3.56 in benefits** for every $1 invested in energy efficiency in 2013.
Wisconsin	Incremental electricity savings of 0.77% of sales per year in 2015-2018.	*Regulation*: Order, Docket 5-GF-191 Order 9501-FE-120 2005 *Legislation*: Wisconsin Act 141	$86M	619 GWh	**$3.33 in benefits** for every $1 invested in energy efficiency in 2014.

North Dakota does not currently have any statewide mandatory or voluntary energy efficiency standards for electric utilities. Under several regulatory decisions and settlement agreements (e.g. Xcel Energy, in Case No: PU-07-776) utilities in North Dakota are required to submit resource plans every 2 years. The Public Service Commission does not, however, require utilities to report the impacts of their energy efficiency programs, and there are no statutory or regulatory

[6] Indiana's EEPS was eliminated through Senate Bill 340 in 2014. The state is expecting a significant decrease in energy savings for 2015.

[7] Ohio froze its energy efficiency resource standard in 2014, allowing utilities that have achieved 4.2% cumulative savings to reduce or eliminate their program offerings. The state is expecting a significant decrease in energy savings for 2015.

requirements for program evaluation. As a result, it is difficult for the state to determine the level of energy savings that electricity providers are achieving through their program offerings, and the extent to which these efforts can aid the state in achieving its targets under the Clean Power Plan.[8]

For example, if North Dakota were to adopt an energy savings target of 1% of annual retail sales, the policy would result in an estimated 61,375 MWh of savings per year.[9] This is equivalent to the amount of electricity required to power approximately 4700 homes in North Dakota every year.[10]

Recommendation: *North Dakota should commission an energy efficiency potential study to quantify the size of the energy efficiency resource in the state, and consider the energy, economic, and societal benefits of an Energy Efficiency Resource Standard.*

III. Statewide building energy codes are recognized as a simple and cost-effective way to reduce energy consumption and lower energy bills in residential and commercial buildings.

Building energy codes establish minimum efficiency standards for new and renovated residential and commercial construction. These codes typically cover building components and systems such as insulation, windows, lighting, heating and cooling.[11] Nationally, buildings account for about 70% of electricity consumption, and building codes are estimated to have saved about $5 billion on energy bills, 500 trillion Btu of total energy, and 40 billion kWh of electricity while avoiding 36 million metric tons of CO2 emissions in 2012.[12] Building energy codes can also result in non-energy benefits: including improving the safety of the air breathed by occupants, increasing durability of heating and cooling systems, reducing the potential for premature equipment failure, creating a more comfortable environment for occupants, mold prevention, and easier compliance with fire safety requirements.[13]

---

[8] In 2013, savings through utility-administered energy efficiency in North Dakota were estimated as 0.06% of retail sales.

[9] Assuming the standard was imposed on investor-owned utilities, and assuming 2013 retail electricity sales. In 2013, the three investor-owned utilities in North Dakota were responsible for 6,137,537 MWh in retail electric sales. U.S. Energy Information Administration, North Dakota Electricity Profile 2013, Table 1. 2013 Summary statistics (North Dakota).

[10] Assuming an average residential electricity consumption in North Dakota of 1,091 kWh/month. Electricity Local, North Dakota Electricity Rates & Consumption. Webpage: http://www.electricitylocal.com/states/north-dakota/.

[11] National Association of State Energy Officials (NASEO), Energy Efficiency Strategies for Clean Power Plan Compliance: Approaches and Selected Case Studies, July 2015. PDF File: http://111d.naseo.org/Data/Sites/5/naseo-ee-for-cpp-2015-july-30.pdf.

[12] Id.

[13] Meres, R., Institute for Market Transformation, and Makela, E., Britt/Makela Group, Inc. "Building Energy Codes: Creating Safe, Resilient, and Energy-Efficient Homes." July 2013.

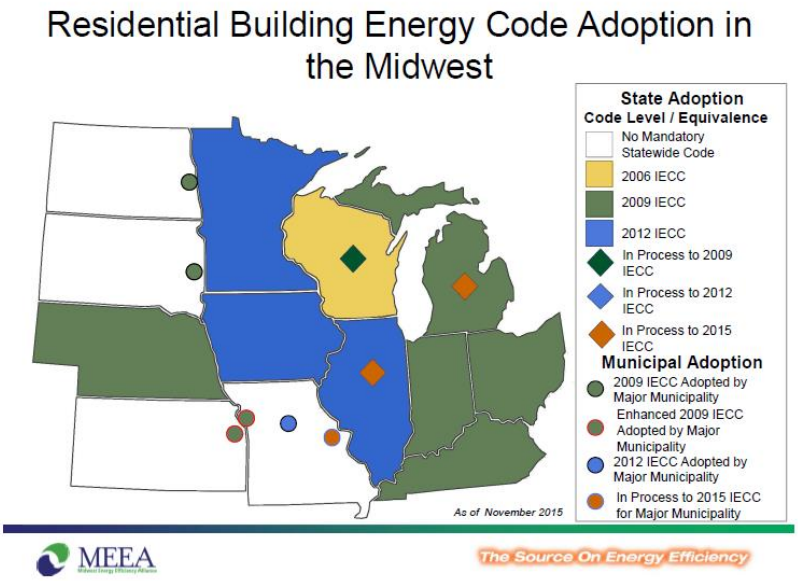
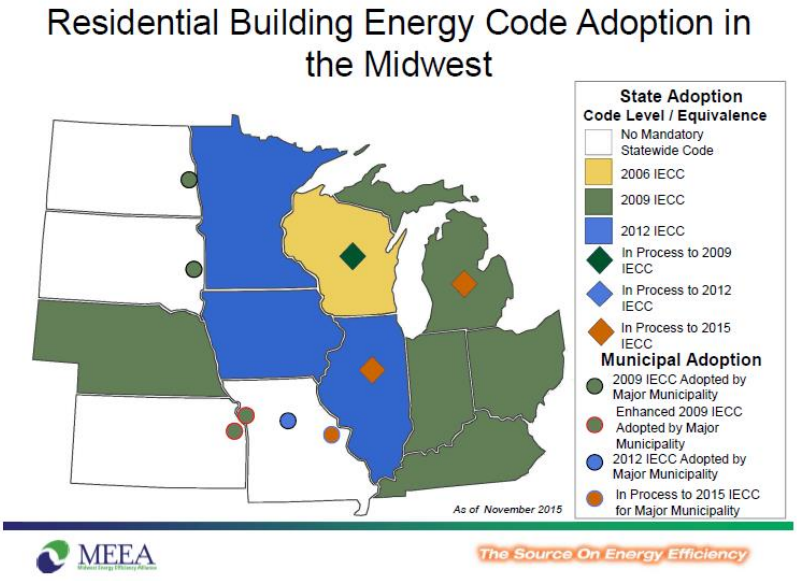


Figure 2 and

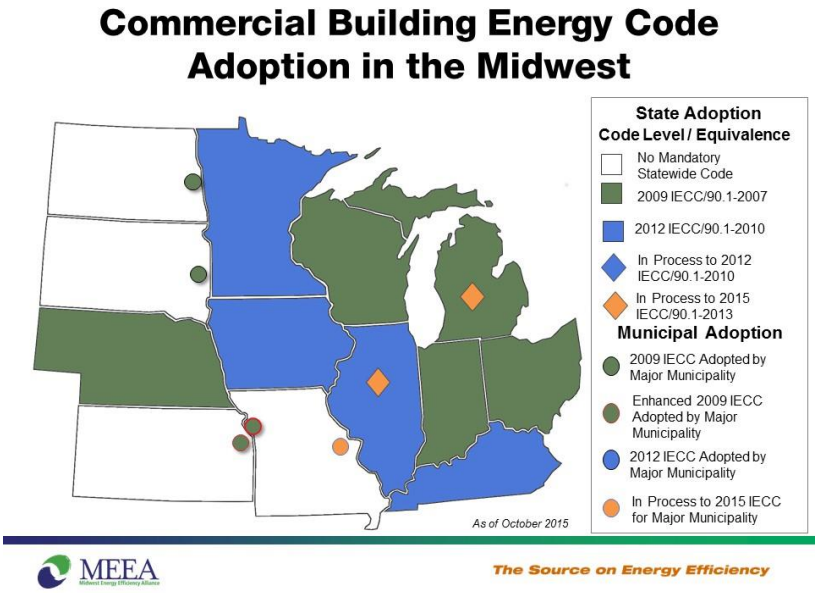
Figure **3** illustrate the current status of building energy code adoption by states across the Midwest. North Dakota is one of four states in the region that has not adopted a residential or commercial building energy code, as of this submittal.

Figure 2: Residential Building Energy Code Adoption in the Midwest[14]



[14] Midwest Energy Efficiency Alliance, Building Energy Codes, December 16, 2015. Webpage, <http://mwalliance.org/policy/building-energy-codes>

Figure 3: Commercial Building Code Adoption in the Midwest[15]



As summarized in Table 2, the adoption of the most recent building energy codes for residential and commercial construction (2015 IECC) could result in savings of more than 12,000 MWh and $1.15 million on an annual basis for North Dakota.[16]

Table 2: Potential Energy Benefits of Building Code Adoption

	Energy Savings Potential with Adoption of Latest Building Energy Codes (MWh/yr)	Cost Savings Potential with Adoption of Latest Building Energy Codes ($/yr)
Residential Sector (2015 IECC)	3,430	338,000
Commercial Sector (2015 IECC/ASHRAE	9,324	825,000

[15] Id.

[16] These are conservative estimates. Our analysis assumes that residential construction in North Dakota is fully compliant with the 2009 codes for residential construction, which is not mandatory in the state. In addition, given the recent acceleration in the growth of North Dakota's economy, it is likely that an increasingly large proportion of North Dakota's building stock will constitute new construction in the coming years, and thus, savings potential on an annual basis is likely to be greater than our projections. Our analysis assumes a retail electricity rate of 9.86 cents/kWh for residential customers and 8.85 cents/kWh for commercial customers in North Dakota. U.S. Energy Information Administration, Electric Power Monthly, Table 5.6B Average Price of Electricity to Ultimate Customers by End-Use Sector by State, Year-to-date through September 2015 and 2014 (cents per kilowatthour). Our analysis assumes a baseline of the 2009 IECC for residential construction; unamended in Fargo and Bismarck, but amended in the rest of the state. Our analysis assumes a baseline of the 2009 IECC/90.1-2007 ASHRAE for commercial buildings in Fargo, Bismarck and Grand Forks, and a baseline of the 2006 IECC/90.1-2004 ASHRAE for commercial buildings in the rest of the state.

90.1-2013)		
Total	**12755**	**1,163,000**

Recommendation: *North Dakota should commission a study of the potential for energy savings from building energy code adoption and enforcement in the state, and work with local governments to consider the energy, economic, and other societal benefits of adopting statewide building energy codes for residential and commercial construction.*

IV. North Dakota should seek to pursue opportunities for expanding energy efficiency through privately funded energy efficiency and energy savings performance contracting.

Spending on utility ratepayer-funded energy efficiency programs represents only approximately half of the overall energy efficiency market. North Dakota should seek to pursue opportunities for expanding energy efficiency through privately-funded (also called "customer-funded") projects. The state may employ several strategies for doing so, including encouraging or facilitating the use of energy auditing and energy savings performance contracts between consumers (including public agencies) and third-party energy service companies (ESCOs).[17] Public agencies in North Dakota, in particular, may take advantage of the state's energy savings performance contracting statute, which allows public agencies to enter into "guaranteed energy savings contracts."[18] Under this statute, public agencies may enter into a guaranteed energy savings contract with an energy services company so long as the agency finds that it is not likely to spend more on the energy conservation measures than it would save in energy and operation costs over a period of 15 years.[19] These contracts can be an appealing investment opportunity for public institutions given their longer investment horizons.

Figure 4 and Figure 5 illustrate the significant, continuing and projected growth of the U.S. ESCO industry, and its share of the energy efficiency industry in comparison to utility spending.

[17] National Association of Clean Air Agencies (NACAA), "Implementing EPA's Clean Power Plan: A Menu of Options," May 21, 2015.
[18] N.D.C.C. § 48-05-11.
[19] N.D.C.C. § 48-05-11.

Figure 4: Investment in Energy Efficiency Through ESPC 1993-2012 ($ billion).[20]

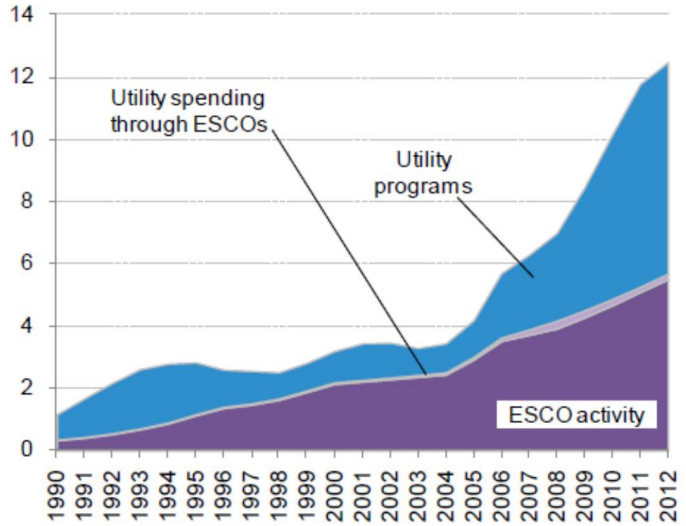
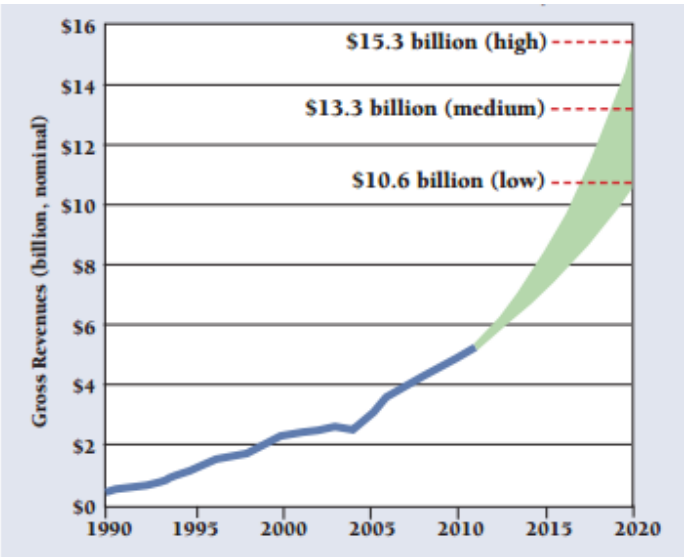


Figure 5: Growth of the US ESCO Industry[21]

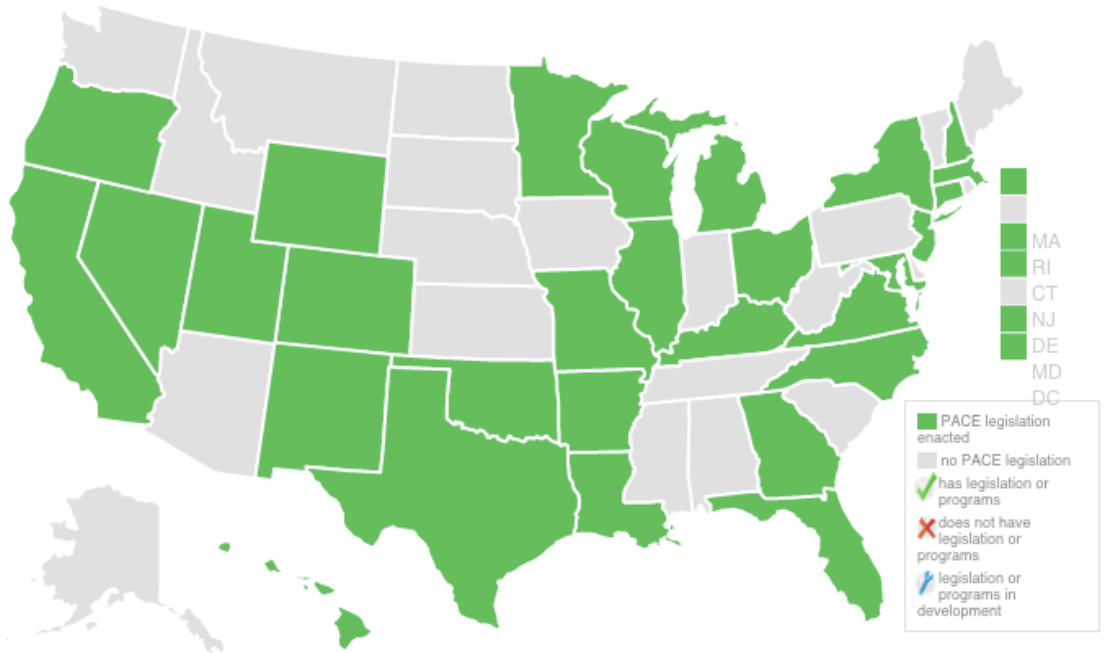


Energy savings performance contracting is an attractive option for the MUSH (municipal, university, state, and hospital building) market. However, the upfront costs of energy efficiency can be a barrier for consumers outside of the MUSH market seeking to implement energy efficiency upgrades in their facilities or homes. In order to facilitate performance contracting by these consumers, North Dakota should seek to improve consumer access to affordable financing (in addition to providing tax incentives for energy efficiency improvements). These include property assessed clean energy (PACE) and on-bill financing (OBF).

[20] Source: RAP; Bloomberg New Energy Finance.
[21] NACAA, "EPA's Clean Power Plan: A Menu of Options," May 21, 2015 (citing Stuart, E., Larsen, P.H., & Goldman, C.A. Lawrence Berkeley National Laboratory. "Current Size and Remaining Market Potential of US ESCO Industry." September 2013.)

PACE is a mechanism for financing energy efficiency (as well as water upgrades and renewable energy) to buildings, whereby local governments issue loans to residential[22] and commercial property owners who want to make energy efficiency improvements.[23] Loan payments under PACE take the form of an assessment added to the property tax on the building.[24] In order for a local (or state) government to implement PACE, authorizing legislation is typically required. Figure 6 shows a map of states with authorizing PACE legislation.

Figure 6: Map of States with Authorizing PACE legislation[25]



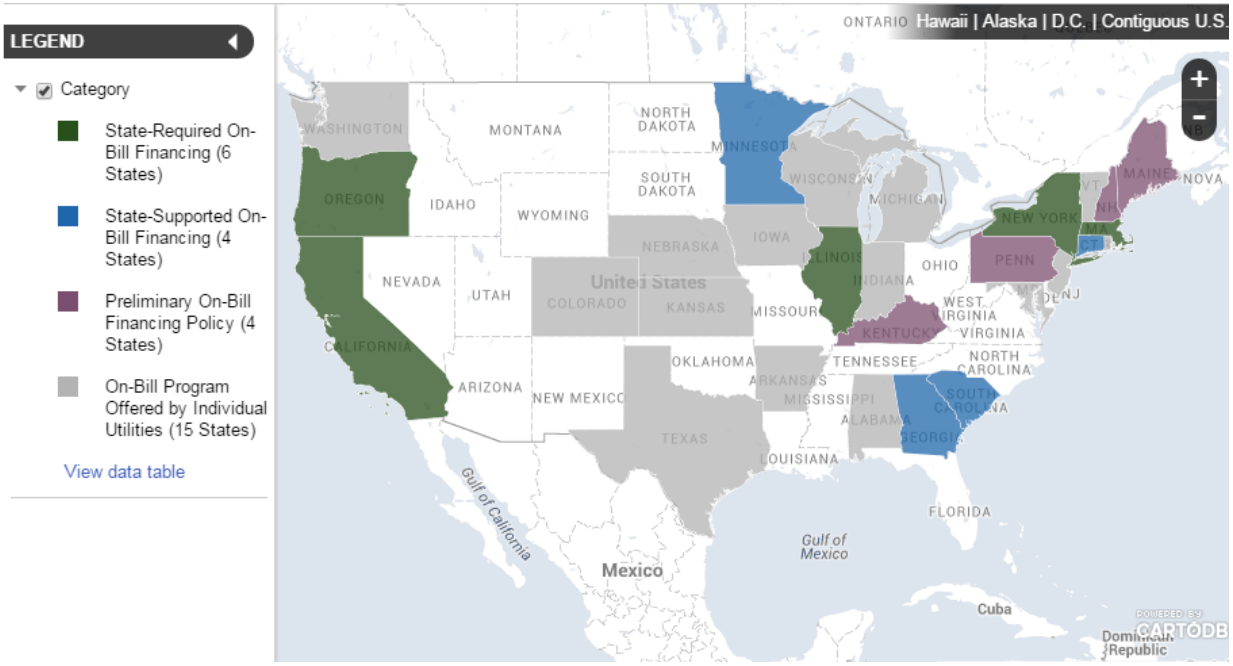
OBF allow building owners and occupants to pay for energy efficiency (or clean energy) investments over time through an additional charge on utility bills.[26] OBF is typically structured as a loan or tariff, but could also be structured as an energy services agreement or lease between a utility and its customer. [27] While some states have passed laws or regulations that require utilities to offer an OBF program, other states have legislation or regulation simply supporting

---

[22] The Federal Housing Authority is developing guidelines under which it will support residential borrowers seeking to make energy efficient improvements to their homes using PACE financing.
[23] American Council for an Energy Efficient Economy (ACEEE), Property Assessed Clean Energy (PACE), December 16, 2015. Webpage: < http://aceee.org/sector/state-policy/toolkit/pace>
[24] Id.
[25] PACENation, "Pace Market Is Growing," December 16, 2015. Webpage: < http://www.pacenation.us/pace-programs/#map>
[26] Center for Climate and Energy Solutions, On-Bill Programs. Webpage: <http://www.c2es.org/us-states-regions/policy-maps/on-bill-financing>
[27] American Council for an Energy Efficient Economy (ACEEE), On-Bill Financing for Energy Efficiency Improvements, December 16, 2015. Webpage: < http://aceee.org/sector/state-policy/toolkit/on-bill-financing>

the implementation of a program. Figure 7 shows a map of states and their policies with regard to OBF.

Figure 7: Map of On-Bill Programs[28]



Recommendation: *North Dakota should pursue low-cost financing options to expand customer-funded energy efficiency projects through efforts already enabled by statute (ESPC) or new means such as PACE or OBF.*

V. North Dakota should explore the potential for achieving energy savings from energy efficiency in the industrial sector.

The industrial sector is a very large consumer of energy in the United States, and much of this industry is concentrated in the Midwest. Five Midwest states are in the top ten consumers of total energy in the industrial sector: Indiana (4), Illinois (5), Ohio (6), Kentucky (9), and Iowa (10). Four more are in the top 25: Michigan (12), Minnesota (13), Wisconsin (17), and Kansas (22).[29] Nationally, 40% of energy efficiency potential is found in the industrial sector,[30] and as there is a

[28] Center for Climate and Energy Solutions, On-Bill Programs. Webpage: <http://www.c2es.org/us-states-regions/policy-maps/on-bill-financing>

[29] Energy Information Administration (EIA). 2013. Electric power sales, revenue and energy efficiency Form EIA-861 detailed data files. (Excel file dsm_2012.xls in archive f8612012.zip) Washington, D.C.: U.S. Energy Information Administration. http://www.eia.gov/electricity/data/eia861/

[30] Granade, H., J. Creyts, A. Derkach, P. Farese, Sy. Nyquist, and K. Ostrowski. 2009. Unlocking Energy Efficiency in the US Economy. New York: McKinsey & Company. http://www.mckinsey.com/client_service/electric_power_and_natural_gas/latest_thinking/unlocking_energy_efficiency_in_the_us_economy.

concentration of industrial consumption in the Midwest, it can be expected that this region also has a concentration of potential energy savings. Based on this it can be expected that the potential savings from industrial energy efficiency will also be concentrated in the Midwest. Capturing these savings through utility energy efficiency program offerings is vitally important for creating a compliance path for states to meet carbon emission reduction targets set forth in the impending Clean Power Plan. While energy efficiency from the residential and small business sectors can play a valuable role in generating energy savings, some of the most cost-effective means of meeting the emissions reduction targets under the Clean Power Plan are found in industrial energy efficiency. In a study looking at 72 ratepayer-funded industrial energy efficiency programs across the Midwest, most programs returned $2.00 - $5.00 in benefits for every $1.00 invested in energy efficiency improvements.[31]

Recommendation*: North Dakota should collaborate with industrial customers and trade groups to explore the potential for capturing energy savings from energy efficiency in the industrial sector.*

VI. Energy Efficiency and the Clean Power Plan

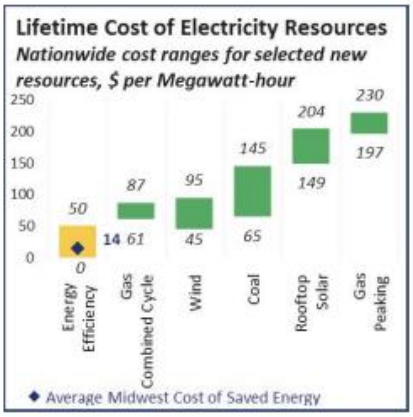
Demand-side energy efficiency policies and programs are a least-cost approach for states to meet their emission reduction goals under the CPP[32], whether a state chooses to comply with the CPP by electing a mass-based or a rate-based carbon emissions target. The levelized cost of saved energy through energy efficiency is an average of $14/MWh in the Midwest – roughly one third the levelized cost of electricity generated by new natural gas and coal and half the levelized cost of electricity generated by new wind capacity (see Figure 8).

Figure 8: Levelized Lifetime Costs of Electricity Resources[33]

[31] Ehrendreich, Gregory. 2015. Living Up to Its Potential: Industrial Energy Efficiency in the Midwest. Midwest Energy Efficiency Alliance. http://www.mwalliance.org/sites/default/files/uploads/Ehrendreich_2015_Living-up-to-its-potential_5-97.pdf

[32] National Association of State Energy Officials (NASEO), Energy Efficiency Strategies for Clean Power Plan Compliance: Approaches and Selected Case Studies, July 2015. PDF File: http://111d.naseo.org/Data/Sites/5/naseo-ee-for-cpp-2015-july-30.pdf.

[33] Midwest Energy Efficiency Alliance (MEEA), Energy Efficiency: A Good Investment for the Midwest, PDF File: < http://www.mwalliance.org/sites/default/files/uploads/advokit/MEEA_2014_AdvoKit_Factsheet-Midwest-Regional.pdf> (citing LBNL 2014, Lazard 2013).



EPA has encouraged states to use energy efficiency as a compliance strategy to meet their emission reduction goals under the CPP.[34] Under a mass-based approach, energy efficiency can help states achieve compliance by displacing fossil generation and its associated emissions. Under a rate-based approach, energy efficiency can help states achieve compliance by generating Emission Rate Credits ("ERCs"), which can be used by regulated electric generating units in order to reduce their effective rate of carbon emissions.

Whether North Dakota chooses a rate-based or mass-based emission target, it should incorporate energy efficiency into its plan for compliance in order to meet its targets in a least-cost manner. The state has significant energy efficiency resource potential[35], and should seek to leverage this resource through the policies described in the recommendations above. The CPP allows states to use a wide range of demand-side energy efficiency measures towards compliance[36] including: energy efficiency measures that reduce electricity use in residential and commercial buildings, industrial facilities, and other grid-connected equipment; water efficiency programs that improve energy efficiency at water and wastewater treatment facilities; measures installed by energy service companies; measures installed as a result of programs administered by electric utilities, state entities, and other private and non-profit entities; building energy codes; and state appliance and equipment standards, *inter alia*.[37] While several of these measures would require legislative or regulatory action by the state, others do not.

---

[34] U.S. Environmental Protection Agency (EPA), Fact Sheet: Energy Efficiency in the Clean Power Plan, August 2015. Web Page: http://www.epa.gov/cleanpowerplan/fact-sheet-energy-efficiency-clean-power-plan.

[35] James, C., Takahashi, K. and Steinhurst, W. Synapse Energy Economics, Inc. North Dakota Energy Efficiency Potential Study Report. December 1, 2009.

[36] The CPP names several energy efficiency measures as eligible to generate ERCs, which would in turn be used by affected units to adjust their effective emission rates and thereby achieve compliance in states electing a rate-based target. In states electing a mass-based target, energy efficiency measures would help states achieve compliance by simply reducing the need to generate electricity from emitting sources, and thus, the EPA places no restrictions on the types of energy efficiency measures that such a state may employ in order to help achieve its carbon emission target.

[37] 80 Fed. Reg. 64901 (Oct. 23, 2015).

The Department should also note that EPA has incentivized the early implementation of energy efficiency in states through the Clean Energy Incentive Program ("CEIP"). States may implement the CEIP on a voluntary basis, whether they elect to meet a rate- or mass-based goal under the CPP. The CEIP awards energy efficiency measures implemented in low-income communities with an additional "matching" federal incentive for every allowance or ERC awarded to the project for the megawatt-hours ("MWhs") of savings it generates. The CEIP presents a potential $8 million opportunity for North Dakota,[38] with the potential to create a host of long-term benefits for low-income households and communities and the business that serve them. These benefits include improved health and safety, increased property values, and improved comfort in residences[39], and enhanced business competitiveness, an improvement in the working environment and job retention and growth at businesses.[40]

[38] If North Dakota chooses to participate in the CEIP, the size of the pool of matching federal credits would be at least the equivalent of 2,150,635 tons of CO2. Assuming that half of this pool of matching federal incentives was reserved for energy efficiency projects, and factoring in the equally large state CEIP set-aside, the total credits available to energy efficiency projects implemented in low-income communities in North Dakota under the CEIP would be the equivalent of 2,150,635 tons of CO2. At a relatively conservative price of carbon at $4/ton, this equates to $8.6 million.

[39] Kushler, M., York, D., and Witte, P. American Council for an Energy Efficient Economy (ACEEE). "Meeting Essential Needs: The Results for a National Search for Exemplary Utility-Funded Low-Income Energy Efficiency Programs." September 2005.

[40] The value of the productivity and operational benefits derived from industrial energy efficiency measures, for example, can be up to 250% of the value of the energy savings delivered by these measures. See International Energy Agency, Capturing the Multiple Benefits of Energy Efficiency, 2014. PDF File, https://www.iea.org/Textbase/npsum/MultipleBenefits2014SUM.pdf.