STATE OF MICHIGAN

APPLICATION TO THE UNITED STATES DEPARTMENT OF ENERGY
FOR
STATE ENERGY PROGRAM (SEP) FORMULA GRANT
AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) 2009
FUNDING OPPORTUNTIY NUMBER: DE-FOA-0000052

PREPARED BY

THE BUREAU OF ENERGY SYSTEMS
DEPARTMENT OF ENERGY, LABOR, & ECONOMIC GROWTH (DeLEG)
May 12, 2009

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The American Recovery and Reinvestment Act (ARRA) of 2009, Public Law 111-5, appropriated $3.1 Billion dollars in funding for Department of Energy (DOE) formula-based grants to states under the State Energy Program. This document summarizes the state of Michigan's application to DOE for State Energy Program (SEP) Formula grant funding.

Under the SEP-ARRA state formula allocation, Michigan received $82,035,000 dollars. The state of Michigan has elected to invest its allocations as follows: $57 million will be used to reduce energy consumption in state-owned government buildings and facilities; $24 million to facilitate energy efficiency in the private sector and drive supply chain diversification into renewable energy sectors; and $1 million to create opportunities for wind energy in Michigan. These investments are necessary to relieve stresses on the state budget, create jobs, and improve Michigan businesses competitiveness in the marketplace.

Additional information on Michigan's Recovery Act activities can be found at www.michigan.gov/recovery.

Energy Efficiency and Distributive Generation in State-owned Buildings ($57 million)

The goal of this initiative is three fold (1) Reduce consumption of energy in state-owned and operated government buildings and facilities by 25 percent by 2012 by baseline 1990 data; (2) Ensure all new State of Michigan buildings and facilities are constructed to the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) standards and strive towards platinum level; and (3) Create private sector jobs. These goals will be achieved through collaborative partnerships and public and private investments in sustainable energy conservation measures in state buildings that improve energy efficiency, are cost effective and involve energy conservation, use distributed energy resource systems, and improve or retrofit operations that combined heat, power and maintenance efficiencies.

Energy Conservation Measures in State-Owned Buildings

The State Energy Program (SEP) is evaluating a list of high priority, ready-to-implement, green energy projects that can be completed within the timeframe designated in the SEP American Recovery and Reinvestment Act (ARRA) of 2009 Funding Opportunity Announcement. These projects are being evaluated based on scope of work, feasibility, job creation, energy savings, projected cost, private investment, local requirements, and environmental impacts. Priority will be given to projects with highly scored energy efficiency (E2), that improve operations, and are cost effective. Distributive energy systems, i.e. wind turbine, solar panel, biomass, and geothermal will be deployed in state buildings, facilities, and/or properties, where determined to be practical and cost effective. The screening criteria for wind projects will be based on wind speed classifications of three and above, barriers, and building energy usage. Solar projects will be scored based on adjacent building height and orientation, roof size/characteristics, and building energy usage. Biomass energy projects will be scored based on the supply of an appropriate waste feedstock and transportation costs to the waste processing site. Geothermal projects will be scored based on available heat sources, design, heat exchange efficiency, etc.

Steps are underway to leverage greater impacts through such strategies as the use of performance contracting, which will be utilized where feasible to implement retrofits and renewable energy systems. In addition, the SEP will investigate potential opportunities for bulk purchasing of wind energy and solar energy systems to lower equipment cost, ensure availability, and expand manufacturing of these technologies in Michigan.

The SEP will emphasize energy use reductions and energy efficiency assessments at state operated buildings, facilities, and properties of over 20,000 square feet and having at least 80 occupants. The SEP is accelerating the work of its Rebuild Michigan Program, Retired Engineer

Technical Assistance Program, and other resources to identify opportunities for implementing high impact, low cost energy conservation measures. Both programs have conducted over 500 energy assessments over the last three years and identified slightly over 45 mkwh in energy savings. This is being done in accordance with Michigan Public Act (PA) 295 of 2008, Part 3, Section 133. (a) that requires the state to "establish a program of energy analysis of each state building that identifies opportunities for reducing energy use, including cost and energy savings for each such opportunity, and includes a completion schedule. Under the program, the Energy Star assessment and rating program shall be extended to all buildings owned or leased by this state." Rates of implementation and energy savings will be measured as well as an evaluation of success.

Where feasible, the SEP will collaborate with Energy Efficiency and Conservation Block Grant (EECBG) communities, utilities, and the Michigan Public Service Commission on projects of mutual interest and benefits. This includes the utility Energy Optimization programs, as well as smart grid activities and wind/solar/biomass/geothermal energy projects in targeted areas.

The state will continue to evaluate the feasibility of leveraged funding mechanisms such as, revolving loan funding, loan buy-down, and loan guarantees. These mechanisms will be utilized with state departments, in concert with performance contracting for implementation of energy efficiency projects.

For distributed energy projects, the state will focus on identifying partners that can utilize the Investment Tax Credit (ITC) in concert with interagency grants to complete the projects. Where companies are not able to capture the ITC, a blended finance agreement will include grant and partial revolving loans.

Where no ITC option is available, a revolving loan mechanism is not available, and the project timeline requires immediate start up, then a direct interagency grant may be issued. This assures the state is evaluating all the potential financing mechanisms, but it also mindful of the immediacy of performance.

The SEP's overarching objectives are to reduce energy consumption in public buildings by 25 percent by 2012, establish green communities, create markets for renewable energy systems, and create sustainable jobs in energy efficiency and renewable energy sectors.

LEED Certification in State Government Buildings

Michigan currently has 104 LEED certified state government office buildings and facilities. Further, Michigan has issued requirements through Executive Order No. 2007-22 "Enhanced Energy Efficiency and Conservation by State Departments and Agencies." Through this market activity, the SEP will work with the Michigan Department of Management and Budget to ensure that new buildings (design and construction) or major renovations of existing buildings costing $1 million or more in total renovation project costs are energy efficient and environmentally sustainable in accordance with LEED standards. Where feasible, the SEP will encourage government building managers to incorporate LEED standards in all new state-owned buildings and all newly constructed buildings leased by the state. These internal efforts will be promoted as opportunities for entitlement and non-entitlement communities receiving Energy Efficiency and Conservation Block Grants (EECBG) funds directly from the federal Department of Energy and the SEP. The SEP will work with communities and other entities to facilitate this effort.

Energy Efficiency and Supply Chain Diversification into Renewable Energy Sectors ($24 million)

The goal of this project is three fold: (1) Establish a baseline of energy efficiency measures in buildings and gather information on the effectiveness of equipment therein; (2) drive energy efficiency in small industrial operations; and (3) encourage Tier II and Tier III suppliers expansion into high-growth energy sectors such as wind, solar, geothermal, and biomass.

Establish a Baseline of Energy Efficiency in Michigan Buildings:
The Bureau of Energy Systems (BES) will partner with the electric utilities and Michigan's Weatherization Program to gather and analyze data on energy conservation measures in buildings, equipment used therein for heating, ventilation, etc., and energy efficiency in homes. This will be done on a statistically representative sample of Michigan housing stock and businesses. This will establish baseline conditions for monitoring and tracking improvements in energy efficiency over time, as well as help in the description and implementation of resources to facilitate energy efficiency in Michigan. The data collection will be done through surveys, inspections, and energy audits conducted by utilities and the BES.

Industrial Energy Efficiency
To facilitate the adoption of energy efficiency in the private sector, the BES will conduct three hundred (300) energy audits to identify opportunities for reducing energy consumption in small industrial operations. The audits will focus on processes and ancillary operations, building heating/cooling/ventilation systems, pumps/motors, lighting, etc. To drive efficiency, the BES will provide financial assistance to those businesses wanting to implement measures discovered during the course of the energy audit. Equipment purchases will be limited to commercially available technologies that are known to reduce energy consumption, do not represent human health threats, and reduce environmental impacts such as greenhouse gas emissions. Michigan may establish revolving loans and or other financial assistance mechanisms for this purpose.

Supply Chain Diversification into Renewable Energy Sector
The BES will offer financial assistance to Tier II/III Suppliers and Original Equipment Manufacturers to diversify into high-growth renewable energy sectors, invest in advanced manufacturing processes, techniques, designs, and/or other applications use of alternative materials in the production of renewable energy systems. This effort is directed at businesses that are seeking to diversify, perform a unique high-value function, and fill gaps in manufacturing of renewable technologies, and could act as an anchor for business attraction. Companies must have projects ready to go, demonstrate a market for the technology, show how the diversification will result in a leap forward in technology and materials, and how the efforts with contribute to the Governor's 25 percent by 2012 goal and reduce Michigan's dependence on energy imports into the state.

Advancing Opportunities for Wind Energy in Michigan ($1 million)

Given that a critical part of Michigan's 25 by 2012 energy reduction plan is dependent on renewable energy systems within the state, the SEP will finance up to five (5) anemometer projects to collect wind speed data to determine wind energy potential at 100 meters. The data will be analyzed to assist in determining the best location for proposed renewable projects, as well as forecast opportunities for future wind turbine investments and business attraction.

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Michigan Recovery Website
www.michigan.gov/recovery

BES Recovery Information
www.michigan.gov/energyoffice

US Department of Energy
State Energy Program (SEP) Narrative Information Worksheet
(Grant Number: EE00166)

State Title: State Government

1. Market: Buildings

2. State: Michigan

3. Program Year: 2009 Date Start: April 1, 2009 Date End: March 31, 2012

4. Topic Involved in the Overall Program Market (choose all that apply)

    a. Energy Star
    b. Federal, state, and local facilities
    c. Lighting
    d. Performance contracting
    e. Solar power
    f. Wind energy
    g. Biomass energy
    h. geothermal

5. Estimated Annual Energy Savings: 558,000,000 MBtus

6. Description:

    The goal of this project is three fold (1) Reduce consumption of energy in state-owned and operated government buildings and facilities by 25 percent by 2012; (2) Ensure all new State of Michigan buildings and facilities are constructed to Leadership in Energy and Environmental Design (LEED) standards and strive towards platinum level; and (3) Create private sector jobs. This will be achieved through collaborative partnerships, public and private investments in sustainable energy conservation measures in state buildings that improve energy efficiency; cost effective and involve energy conservation; use distributed energy resource systems; improve or retrofit operations that combined heat, power and maintenance efficiencies.

    Energy Conservation Measures in State-Owned Buildings
    Create a list of high priority, ready-to-implement, green energy projects that can be completed within the timeframe designated in the SEP American Recovery and Reinvestment Act (ARRA) of 2009 Funding Opportunity Announcement. Michigan has established a list of 2,000 work projects. These projects be evaluated and scored on scope of work, feasibility, job creation, energy savings, projected cost, private investment, local requirements, and environmental impacts. Priority will be given to highly scored energy efficiency (E2), improve operations, and cost effective. Distributive energy systems, i.e. wind turbine, solar panel, biomass, and geothermal will be deployed in state buildings, facilities, and/or properties where practical and cost effective. The screening criteria for wind projects will be based on wind speed classifications of three and above, barriers, and building energy usage. Solar project will be scored based on building height and orientation, roof size/characteristics, and building energy usage. Biomass energy projects will be scored based on the supply of an appropriate waste feedstock and transportation cost to the site where it will be used. Geothermal projects will be scored based on heat source, design, heat exchange efficiency, etc.

    Steps are underway to leverage greater impacts through such strategies as the use of performance contracting, which will be utilized where feasible to implement retrofits and renewable energy systems. In addition, we will investigate the use of bulk purchasing of

wind energy and solar energy systems to lower equipment cost, ensure availability, and expand manufacturing of these technologies in Michigan.

Michigan will emphasize energy reductions and energy efficiency assessments at state operated buildings, facilities, and properties of over 20,000 square feet and having at least 80 occupants. Michigan is accelerating the work of its Rebuild Michigan Program, Retired Engineer Technical Assistance Program, and other resources to identify opportunities for implementing high impact, low cost energy conservation measures. Both programs have conducted over 500 energy assessments over the last three years and identified slightly over 45 mkwh in energy savings. This is being done in accordance with Michigan Public Act (PA) 295 of 2008, Part 3, Section 133.(a) that requires the state to "establish a program of energy analysis of each state building that identifies opportunities for reducing energy use, including cost and energy savings for each such opportunity, and includes a completion schedule. Under the program, the Energy Star assessment and rating program shall be extended to all buildings owned or leased by this state." Rates of implementation and energy savings will be measured as well as an evaluation of success.

Where feasible, Michigan will collaborate with Energy Efficiency and Conservation Block Grant (EECBG) communities, utilities, and the Michigan Public Service Commission on projects of mutual interest and benefits. This includes the utility Energy Optimization programs, as well as smart grid activities and wind/solar/biomass/geothermal energy projects in targeted areas.

The state will continue to evaluate the feasibility of leveraged funding mechanisms such as, revolving loan funding, loan buy-down, and loan guarantees. These mechanisms will be utilized with state departments, in concert with performance contracting for implementation of energy efficiency projects.

For distributed energy projects, the state will focus on identifying partners that can utilize the Investment Tax Credit (ITC) in concert with interagency grants to complete the projects. Where companies are not able to capture the ITC, a blended finance agreement will include grant and partial revolving loans.

Where no ITC option is available, a revolving loan mechanism is not available, and the project timeline requires immediate start up, then a direct interagency grant may be issued. This assures the state is evaluating all the potential financing mechanisms, but it also mindful of the immediacy of performance.

Michigan's overarching objectives are to reduce energy consumption in public building by 25 percent by 2012, establish green communities, create markets for renewable energy systems, and create sustainable jobs in energy efficiency and renewable energy sectors.

LEED Certification in State Government Buildings

Michigan currently has 104 LEED certified state government office buildings and facilities. Further, Michigan has issued requirements through Executive Order No. 2007-22 "Enhanced Energy Efficiency and Conservation by State Departments and Agencies." Thus in doing so, Michigan's State Energy Program, through this market activity will work with the Michigan Department of Management and Budget to assure that new buildings (design and construction) or major renovations of existing buildings costing $1 million or more in total renovation project costs are energy efficient and environmentally sustainable in accordance with LEED standards. Where feasible, Michigan will encourage government building managers to incorporate LEED standards in all new state-owned buildings and all newly constructed buildings leased by the state. These internal efforts will be promoted as opportunities for entitlement and non-entitlement communities receiving EECBG funds directly from the federal Department of Energy and Michigan's State Energy Program. The State Energy Program will work with communities and other entities to facilitate this effort.

7. Program Year Milestones

Milestone		Planned (Number)
1	Identify high priority energy projects in state buildings by April 2009.	2000
2	Put in place system for tracking SEP ARRA project performance data, i.e. number of jobs created, energy saved, etc., by June 2009.	1
3	Evaluate and prioritize potential grant projects by July 2009	1,500
4	Conduct educational meeting with state agencies on wind energy and solar energy systems by August 2009. Provide technical assistance as necessary.	4
5	Issue first round loans to state agencies to implement energy efficiency, energy conservation, and renewable energy projects by September 2009. (Where feasible, grants will be conditioned with performance contracting requirement.)	10
6	Issue first round grants to state agencies to implement energy efficiency, energy conservation, and renewable energy projects by September 2009 (Where feasible, grants will be conditioned with performance contracting requirement.)	10
7	Conduct energy audits on state facilities to identify additional energy efficiency and conservation measures by September 2012.	125
8	Submit quarterly progress reports	12
9	Post progress reports and other pertinent information on ARRA related projects and activities on Internet.	12
10	Conduct quarterly meetings with grantees and partners to access progress on metric activities, identify barriers (if any), and take corrective actions (if necessary).	12
11	Closeout grants and report final project activities to DOE by March 2012.	50
12	Evaluate/measure impact of activities on state operations, greenhouse gas reduction, and impact on indirect job creation (if information is available).	1

8. Standard Metric (required):**

JOB METRICS	Planned
Jobs Created	609
Jobs Retained	0
TOTAL JOBS	609

9. Specific Metric Activity (required)**
Metric Activity: _____

SPECIFIC METRICS	Planned
Building Retrofits	1,500
Building Energy Audits	125
Renewable Energy Capacity and Generation	10
Technical Assistance	50
Workshops, Training, and Education	4

10. User Specific Metric (optional):*

METRIC	Planned
Electricity consumption reduction	$45M kw
Natural gas consumption reduction	$2M ccf

11. Program Year Funds by Source*

a. SEP grant (all funds in the approved budget)	Planned
	$56,735,365
Market Budget Total	$56,735,365
b. Leverage funds anticipated (outside approved budget)	

US Department of Energy
State Energy Program (SEP) Narrative Information Worksheet
(Grant Number: EE00166)

State Title: Energy Efficiency and Supply Chain Diversification into Renewable Energy Sectors

12. Market: Industrial

13. State: Michigan

14. Program Year: 2009 Date Start: April 1, 2009 Date End: March 31, 2012

15. Topic Involved in the Overall Program Market (choose all that apply)

    a. Financing Energy Programs
    b. General Energy Efficiency in Industry
    c. Industrial Processing.
    d. Manufacturing
    e. Procurement of Efficient Products
    f. Biomass Power
    g. Solar Power
    h. Wind Power

16. Estimated Annual Energy Savings: 255,357,971 MBtus

17. Description

    The goal of this project is three fold: (1) Establish a baseline of energy efficiency measures in buildings and gather information on the effectiveness of equipment therein; (2) drive energy efficiency in small industrial operations; and (3) encourage Tier II and Tier III suppliers expansion into high-growth energy sectors such as wind, solar, geothermal, and biomass.

    Establish a Baseline of Energy Efficiency in Michigan Buildings
    The Bureau of Energy Systems (BES) will partner with the electric utilities and Michigan's Weatherization Program to gather and analyze data on energy conservation measures in buildings, equipment used therein for heating, ventilation, etc., and energy efficiency in homes. This will be done on a statistically representative sample of Michigan housing stock and businesses. This will establish baseline conditions for monitoring and tracking improvements in energy efficiency over time, as well as help in the description and implementation of resources to facilitate energy efficiency in Michigan. The data collection will be done through surveys, inspections, and energy audits conducted by utilities and the BES.

    Industrial Energy Efficiency
    To facilitate the adoption of energy efficiency in the private sector, the BES will conduct three hundred (300) energy audits to identify opportunities for reducing energy consumption in small industrial operations. The audits will focus on processes and ancillary operations, building heating/cooling/ventilation systems, pumps/motors, lighting, etc. To drive efficiency, the BES will provide financial assistance to those businesses wanting to implement measures discovered during the course of the energy audit. Equipment purchases will be limited to commercially available technologies that are known to reduce energy consumption, does not represent human health threats, and reduce environmental impact such as greenhouse gases. Michigan may establish revolving loan and or other financial assistance mechanisms for this purpose.

Supply Chain Diversification into Renewable Energy Sector

The BES will offer financial assistance to Tier II/III Suppliers and Original Equipment Manufacturers to diversify into high-growth renewable energy sectors, invest in advanced manufacturing processes, techniques, designs, and/or other applications use of alternative materials in the production of renewable energy systems. This effort is directed at businesses that are seeking to diversify, perform a unique high-value function, and fills gaps in manufacturing of renewable technologies, and could act as a anchor for business attraction. Companies must have projects ready to go, demonstrate a market for technology, show how the diversification will result in a leap forward in technology and materials, and how the efforts with contribute to the Governor's 25 percent by 2012 goal and reduce Michigan's dependence on energy imports into the state.

18. Program Year Milestones

Milestone		Planned (Number)
1	Put in place a system for tracking SEP American Recovery and Reinvestment Act (ARRA) project performance data, i.e. number of jobs created, energy saved, etc. by June 2009.	1
2	Establish a grant program and revolving loan program to fund energy efficiency, energy conservation, and renewable energy systems projects by September 2009.	2
3	Market revolving loan program and issue loans.	8
4	Issue three grants for manufacturing renewable energy systems by October 2009.	3
5	Conduct baseline energy efficiency audit.	300
6	Submit quarterly progress reports.	12
7	Post progress reports and other pertinent information on ARRA related projects and activities on Internet.	12
8	Conduct quarterly meetings with loan recipients to access progress on metric activities, identify barriers (if any), and take corrective actions (if necessary).	12
9	Closeout loan and report final project activities to DOE by March 2012.	3
10	Evaluate impact of activities on state operations, greenhouse gas reduction, and impact on indirect job creation (if information is available).	1

19. Standard Metric (required):**

JOB METRICS	Planned
Jobs Created	252
Jobs Retained	0
TOTAL JOBS	252

20. Specific Metric Activity (required)**

Metric Activity: _____

SPECIFIC METRICS	Planned
Loans and Grants	20
Energy Savings	255MMBtus
Industrial Process Efficiency (kwh equivalents)	TBD
Renewable Energy Market Development	3

21. User Specific Metric (optional):*

METRIC	Planned
NA	

22. Program Year Funds by Source*

a. SEP grant (all funds in the approved budget)	Planned
	$23,954,270.00
Market Budget Total	$23,954,270.00
b. Leverage funds anticipated (outside approved budget)	

US Department of Energy
State Energy Program (SEP) Narrative Information Worksheet
(Grant Number: EE00166)

State Title: Advancing Opportunities for Wind Energy in Michigan

23. Market: Policy and Programming

24. State: Michigan

25. Program Year: 2009 Date Start: April 1, 2009 Date End: March 31, 2012

26. Topic Involved in the Overall Program Market (choose all that apply)

    a. Financing energy programs
    b. Policy and energy legislation
    c. Public Information
    d. State energy strategic plans

27. Estimated Annual Energy Savings: 0.00 MBtus

28. Description (executive summary of goals and objectives)

    Michigan will administer the SEP American Recovery and Reinvestment Act grant and other discretionary funding received from the U.S. Department of Energy. Administration will include financial and project management of sub-grants and contracts, quarterly financial and progress reports to DOE, and participation in DOE sponsored meetings.

    Given that a critical part of Michigan's 25 by 2012 energy reduction plan is dependent on renewable energy systems within the state, Michigan will finance up to five (5) anemometer projects to collect wind speed data to determine wind energy potential at 100 meters. The data will be analyzed to assist in determining the best location for proposed renewable projects, as well as forecast opportunities for future wind turbine investments and business attraction.

    Program staff will assist in the development and implementation of state energy policy. They will coordinate with the Governor's Office, the state legislature, other state agencies, stakeholders, and interested parties on a variety of energy efficiency and renewable energy issues.

    Specifically, staff will interface directly with the Michigan Economic Development Corporation and the Bureau of Workforce Development in melding energy policy and programs with economic development and job creation. Program staff also serve in a technical and educational capacity for other state agencies, local units of government, and small businesses.

29. Program Year Milestones

Milestone		Planned (Number)
1	Submit quarterly financial and progress reports.	12
2	Assist in the development of state energy policy – continue activity throughout grant period.	NA
3	Issue grant for wind speed study at up to 5 locations across the state.	5
4	Complete Anemometer Projects by October 2012 and prepare composite report on findings.	1

30. Standard Metric (required):**

JOB METRICS	Planned
Jobs Created	6
Jobs Retained	0
TOTAL JOBS	6

31. Specific Metric Activity (required)**
Metric Activity: _____

SPECIFIC METRICS	Planned
Clean Energy Policy	1

32. User Specific Metric (optional):*

METRIC	Planned

33. Program Year Funds by Source*

a. SEP grant (all funds in the approved budget)	Planned
	$1,345,365
Market Budget Total	$
b. Leverage funds anticipated (outside approved budget)	

JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
OFFICE OF THE GOVERNOR
LANSING

JOHN D. CHERRY, JR.
LT. GOVERNOR

March 9, 2009

The Honorable Steven Chu
Secretary
United States Department of Energy
Washington, D.C. 20585

Dear Secretary Chu:

In order that the State of Michigan may receive its share of State Energy Program (SEP) funds under the American Recovery and Renewal Act of 2009 (H.R. 1) (ARRA), I am providing the following assurances. I have written to the Chairman of our Public Service Commission to request that he consider additional actions to promote energy efficiency, consistent with the federal statutory language contained in H.R. 1 and the Commission's obligation to maintain appropriate and reasonable rates while protecting the public. I have also written to Michigan's Senate Majority Leader and to the Speaker of the House of Representatives to request that the state legislature consider actions to improve building energy codes, consistent with the ARRA, state law and relevant PURPA requirements.

As we plan for deployment of ARRA funds, we are prioritizing our energy investments to take advantage of existing programs and expand programs where appropriate. The State of Michigan is committed to a robust improvement in energy efficiency and renewable energy, as well as a balanced state energy policy. I can assure you that, within the limits of my authority, we will make progress in energy efficiency and renewable energy.

We look forward to immediate distribution of the Federal SEP funds so that the State of Michigan may move forward in these critical areas.

Sincerely yours,

Jennifer M. Granholm
Governor

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Michigan State Energy Program
Ramp-up Plan

The American Recovery and Reinvestment Act (ARRA) of 2009, Public Law 111-5, appropriated $3.1 Billion dollars in funding for the federal Department of Energy (DOE) to issue/award formula-based grants to states under the State Energy Program. This document summarizes the state of Michigan's application to the U.S. Department of Energy for State Energy Program (SEP) Formula grant funds. The SEP sets state formula allocations; the state of Michigan's allocation is $82,035,000 dollars.

The state of Michigan has conducted a thorough evaluation to use ARRA – SEP funds to maximize the creation and retention of jobs; reduce energy consumption; increase the installation of renewable energy systems; and reduce greenhouse gas emissions. To this end, Michigan will be employing a number of financial mechanisms to maximize the leveraging and sustainability of the ARRA funds; to expedite the implementation of the projects selected for funding; and to build on and compliment existing programs and initiatives that drive the state towards reaching its energy goals and objectives.

Strategy for ARRA – SEP Funds:

Michigan will use ARRA-SEP monies on: (1) implementing energy efficiency upgrades and renewable energy generation at state facilities; (2) facilitating the adoption and deployment of energy efficiency and renewable energy in the private sector by supporting the manufacture of components required for these projects; and (3) create opportunities for wind energy in Michigan.

The state of Michigan has elected to invest approximately $57 million to reduce energy consumption in state-owned governments and facilities by 25 percent by 2012; $24 million to facilitate energy efficiency in the private sector and drive supply chain diversification into renewable energy sectors; and $1 million to create opportunities for wind energy in Michigan. Descriptions of these proposed activities as submitted to the federal Department of Energy as part of Michigan's State Energy Program work plan are in Appendix A. Additional information on Michigan's Recovery Act activities can be found at www.michigan.gov/recovery.

To develop this portfolio of initiatives, the state considered the following:

- Potential funding streams in the ARRA Act, as well as other federal opportunities
- Energy Goals and Objectives
- Existing programs
- Shovel Ready projects both internally and externally
- Key objectives that form the basis of the ARRA Act, i.e. energy efficiency, jobs, renewable energy installation and greenhouse gas impact

Optimizing and Targeting Funding Streams

The targeted use of funds for the ARRA-SEP was designed to compliment other state and federal funding sources. The Energy Efficiency Conservation Block Grant (EECBG) Program will allow cities and counties to implement energy efficiency and conservation strategies in their jurisdiction. Federal weatherization funds; additional state programs and Michigan's utility-sponsored energy efficiency programs will focus on implementing energy efficiency measures in homes and businesses. Michigan plans to use the ARRA-SEP funding to focus on energy efficiency and renewable energy measures in state buildings and stimulating clean energy manufacturing. The traditional SEP will still be funded, but at a small percentage compared to the ARRA-SEP and will maintain the match and expenditure caps. Thus, the traditional SEP will be focused on similar programs to those of previous years but across a broader set of fund elements.

The DELEG is also continuing to examine the competitive funding streams as the Funding Opportunity Announcements are released, and collaborating with other state agencies and external stakeholders to identify partnerships for projects that can compete well at a national level.

Energy and Climate Goals

The state's existing master plan, submitted pursuant to the Energy Policy Act of 2005, is to improve the efficient use of energy by 25 percent by the calendar year 2012, as compared to the 1990 calendar year. In addition, Michigan's Public Act 295 of 2008 establishes energy efficiency goals for state government and private utilities and a renewable portfolio standard of 10 percent by 2015. In addition, in her 2009 State of the State Address, Governor Granholm announced that the state would attempt to reduce its reliance on fossil fuels by 45 percent by the year 2020, as measured against the 2002 baseline year.

In 2007, Governor Granholm appointed a broad group of stakeholders to the Michigan Climate Action Council to develop Climate Action plan for the state. This group recently published its recommendations, which include a statewide 20 percent reduction in greenhouse gas emissions by 2020, and an 80 percent reduction by 2050. The state of Michigan has a number of energy goals:

Program Commitment

The state of Michigan is committed to use the ARRA-SEP funds to create new programs and expand existing programs. It will also use these funds in concert with additional existing energy programs that will result in overall greater achievement in meeting the state's energy goals.

ARRA-SEP funding will help to allow Michigan's many manufacturing companies expand their businesses into clean energy manufacturing jobs, which will compliment the state's existing and successful "Green Jobs Training Program". The ARRA-SEP will also expand and enhance the state's successful Retired Engineer Technical Assistance Program (RETAP). In addition, the ARRA-SEP funds may be used to fund revolving loan fund programs.

Program Enhancement:

The RETAP provides energy and pollution prevention audits; technical assistance; technology demonstration grants; and maintains a student internship program for the state. The focus is on small to medium size businesses.

The annual appropriation for this program is $1,500,000. Fiscal year (FY) 2009 is also at $1,500,000. For FY 2008 the program conducted 120 assessments and provided 137 hours of technical assistance plus reports and in 2009 is estimated to conduct 105 assessments and 800 technical assistance hours. The state funding level of this fund will continue to be $1,500,000 for FY 2010.

The additional funds allocated to the RETAP will be used to enhance the number of contracts for conducting audits, as well as grants for the demonstration of commercially available technologies. Over the next three years, the state proposes supplementing the RETAP with $2.5 million. These funds will also allow the RETAP to increase the number of audits conducted and technology grants given. The additional funds allocated to the RETAP will allow the state to establish an energy efficiency baseline through a statistical number of audits conducted throughout the commercial and residential sectors. The state will partner with the two major investor owned utilities in Michigan to conduct these audits. The results will establish baseline conditions for monitoring and tracking improvements in energy efficiency over time, as well as help in the design and implementation of future energy efficiency program efforts.
The state would contribute $250,000 to the effort to conduct approximately 500 audits. This fund allocation is expected to be matched by each of the two major utilities resulting in a two to one leveraging of these ARRA funds.

The RETAP also has a reporting mechanism that tracks dollars saved, energy saved, waste disposal reduced, and CO2 equivalents.

Mechanisms to promote leveraging of funds:

Michigan Delivering Extended Agreements Locally (MiDEAL): The MiDEAL allows Michigan local units of government to benefit from the State's negotiating and purchasing power by permitting them to purchase from the State's contracts on the same terms, conditions, and prices as State government. Locals benefit not only from the reduced cost of goods and services, but also from indirect savings related to writing specifications, researching industries, processing invitations to bid, recruiting a diverse pool of potential suppliers, and making awards. The MiDEAL Program is authorized by Michigan legislation and has been in existence since 1975. Membership is open to any city, village, county, township, school district, intermediate school district, nonprofit hospital, institutions of higher learning, or community or junior college in Michigan. Executive Directive 2007-22 had a portion dedicated to State purchasing of Energy Efficiency and Energy Star Purchasing, as well as a Material Management Plan. Purchasing Operations surveyed its current vendors in the areas of Janitorial Supplies, Office Supplies, and Tools and Hardware to identify those products that are considered "green" in these categories: Green Seal Approved, Green Seal Certified, Bio-Based, Bio-Renewable, Environmentally Friendly, Recycled, Energy Star Compliant, Federal Energy Management Program, U.S. Environmental Protection Agency Program approved and EPEAT-Electronic Product Environmental Assessment Tool.

Performance Contracting: The state has had the Department of Energy present training in the use of Energy Service Companies for performance contracts. In addition, the state has issued notices of intent to prequalify contractors that would be able to provide these services and accept the terms and conditions to conduct the energy efficiency efforts through performance contracting.

Revolving Loan Funds: The state has extensive experience in effectively managing revolving loan funds, e.g.,State Revolving Loan Fund, Michigan Strategic Fund, Brownfield Redevelopment Loan Fund, Revitalization Revolving Loan Fund, and Small Business Pollution Prevention Loan Program. Additional loan fund and loan guarantee programs are being evaluated with the Departments of Energy, Labor, and Economic Growth, the Michigan Economic Development Corporation, and the Departments of Management and Budget, Treasury and the State Budget Office. The state is currently evaluating which mechanisms, or new mechanisms would best enhance and expedite the implementation of the ARRA-SEP funds.

Collaboration with Existing Programs

Michigan Saves: In 2009, the MPSC created and funded via the LIEEF statewide innovative energy efficiency and distributed renewable energy financing system called *Michigan Saves*. *Michigan Saves* will establish an administrative structure that will operate a supportive fund to serve as an initial capital pool available to finance the installation of energy efficiency measures and renewable energy systems with no up-front cost to utility customers (commercial, industrial, residential).

Green Jobs Initiative:

The ARRA – SEP strategy has been designed to create and retain jobs in the state. This effort will be supported by the robust Green Jobs Training Initiative already successfully in place. The Green Jobs Initiative, a $6 million investment is designed to:

- Increase the number of green industries and businesses in Michigan.
- Develop green education and training programs, spurring the growth of Michigan's green economy.
- Invest in worker education and training to prepare our workers for green jobs.
- Support urban renewal by creating green jobs and training opportunities for a diverse mix of people.

The Green Jobs Initiative designs and implements training programs for green jobs in the following ways:

- *Convene Green Sector Skills Alliances* -- Michigan will invest $1.5 million to create Green Sector Skills Alliances -- alliances of business, labor, government, and

educational leaders who share interest and expertise in a specific green sector of Michigan's economy. In partnership with DELEG, the alliances will bring together the resources and expertise to develop specific training programs for jobs in these green industries.

- *Build Capacity to Provide Green Jobs Training* -- Michigan will invest $1.5 million to help community colleges, universities, and training facilities build their capacity to develop and provide training for green jobs.
- *Invest in Tuition for Green Jobs Training* –Through the "No Worker Left Behind" Initiative, Michigan will provide $3 million in tuition support for eligible individuals pursuing approved green jobs training programs at Michigan colleges and universities.

The success of this program is also a contributing factor and demonstrative of the state's ability to successfully implement programs of the size and breadth of the ARRA funds. The green jobs analysis in Michigan can be seen in the recent report announced May 11, 2009, at the DELEG hosted, the state's first ever green workforce conference – "Green Today, Jobs Tomorrow" 1st Green Jobs Conference with 1,400 leaders including Governor Granholm, U.S. Senators Carl Levin and Debbie Stabenow, U.S. Department of Labor Secretary Hilda Solis and President Obama's green jobs adviser Van Jones. Coupled with this successful event was the release of the Green Jobs Report – only the second such report in the nation, prepared by the Labor Market Information & Strategic Initiatives.

- To view highlights of the report, visit: www.michigan.gov/documents/nwlb/GJC_MI_GreenJobsReport_Onepage_277834_7.pdf
- To view the executive summary of the Green Jobs Report, please visit: www.michigan.gov/documents/nwlb/GJC_Exec_Summary_2_277832_7.pdf
- To view the entire Green Jobs Report, please visit: www.michigan.gov/documents/nwlb/GJC_GreenReport_Print_277833_7.pdf

Expedited Implementation

Qualitative Project Identification:
The state has conducted a number of activities that have laid the groundwork for assuring expedited implementation of projects. Both public and private entities were invited to identify an inventory of Shovel Ready Projects that met the goals of the ARRA.

Governor Granholm has created an Office of Economic Recovery to coordinate all of Michigan's planning under ARRA. The DELEG is the lead in identifying and positioning the state to capture a significant portion of the energy funds made available. To maximize the penetration of energy efficiency; conservation and renewable energy in our state, a blended and collaborative approach has been used to develop the overall use of the funds.

The DELEG assessed each of the funding opportunities and the specific characteristics, allowances, and limitations (provided in the attached summaries and in the excel spreadsheet). In addition, workgroup sessions with multiple state agencies were held to examine potential projects that could meet the ARRA requirements and cross-agency collaborations. In addition, topic workgroups were assembled around some of the competitive fund streams to facilitate strong partnerships and encourage collaborative applications for the competitive grants, even though the state may not be the applicant. These groups included external and internal participants.

State government agencies were asked to assemble an inventory of the projects that would meet the goals of the ARRA. Projects were identified (through outreach and agency self-selection) that provide energy savings opportunities. An interagency work group reviewed these projects and vetted the internal inventory to provide a qualitative prioritization of them based on their readiness and relative importance. The projects were grouped into three tiers. For final selection, there will be a quantitative project solicitation and selection process employed that will identify the projects

with the greatest energy savings opportunities and job impacts, along with key distinguishing characteristics.

Quantitative Project Selection Process:
The state has developed a project solicitation process that will collect the data necessary to select projects that maximize the energy savings opportunities and assures that the metrics will be measured to document performance. Careful data collection will allow for rigorous project ranking and ensure all projects are compared on consistent criteria including: direct job-years, annual energy savings per dollar spent (BTU/$), and annual energy generation. This quantitative selection process is currently underway. The communication during this process is also identifying areas where bulk purchasing, performance contracting and other measures can enhance the performance.

Issuance of Purchasing Guidance and Notices of Intent:
The lead purchasing agency for the state of Michigan, Department of Management and Budget (DMB) has issued a purchasing guidance document to aid state agencies in conducting valid and expedited purchasing for the use of ARRA funds.

The DMB has also issued a Notice of Intent to prequalify energy providers for energy auditing and for performance contracting solutions.

Project Pipelines for Industry/Manufacturing Sector

The Michigan Economic Development Corporation has identified a pipeline of over 2,500 manufacturing supply companies within the state that have the capability to diversify into new verticals. They are continuing to work on assessing their capabilities, prepare them to work with commercially available product lines, and match them with customers. The MEDC and the DELEG are collaborating on the development of the Request for Proposal for this funding element and will be evaluating whether there are state funds and mechanisms that can be leveraged to achieve greater success.