



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

DRAFT
REGIONAL ENERGY EFFICIENCY STRATEGY

September 2, 2009

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Summary

The San Joaquin Valley Air Pollution Control District (District) is embarking on a regional approach to obtain emissions reductions through energy efficiency and conservation. The Regional Energy Efficiency Strategy will focus District efforts on activities throughout the San Joaquin Valley (Valley) that programmatically encourage and incentivize energy efficiency and conservation in multiple sectors of the Valley – residential, commercial, municipal, and industrial. This strategy will not replicate or override the efforts and programs already in place throughout the Valley, such as those successfully managed through the investor-owned utilities and municipal utility districts. Instead, the strategy will help to coordinate efforts to maximize the potential for emissions reductions in the Valley through: (1) broad-reaching outreach and education; (2) additional energy efficiency tools and value-added programs; and (3) increased incentive opportunities for as many sectors as possible.

The District is in a unique position to undertake this endeavor. First and foremost is the fact that the mission of the District as a public health agency is to ensure healthy air and a better quality of life for Valley residents – energy efficiency measures and programs reduce emissions and further that goal. Secondly, the District has a unique regional perspective with established relationships that are critical for coordinating Valley-wide activities and leveraging the resources needed for such an endeavor over an eight-county region. Lastly, the District has a well-established record for bringing fiscal resources into the Valley and helping the Valley get its share of state and federal assistance dollars for reducing emissions for the benefit of Valley residents. The District is indeed a powerful voice for Valley residents and will continue using that voice to increase energy efficiency activities for emissions reductions.

Background

On April 30, 2007 the SJVAPCD Governing Board (Governing Board) adopted the *2007 Ozone Plan*. The *2007 Ozone Plan* included an innovative and comprehensive “dual-path” strategy to attain cleaner air and meet the federal 8-hour ozone standard as expeditiously as possible and prior to the EPA-imposed 2024 attainment deadline. The *2007 Ozone Plan* laid the groundwork for strategies used in the *2008 PM2.5 Plan*, in which the District agreed to additional control measures to reduce directly produced inhalable fine particles (PM2.5).

Historically, and because of its primary responsibility under state law¹, the District has implemented regulatory measures for stationary pollution sources to achieve emissions reductions in the San Joaquin Valley. Such regulatory measures have served to reduce

¹ The state's implementation of the federal Clean Air Act and organization of the air pollution control program are codified in the California Health and Safety Code Section 39000 – 44384.

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

stationary source criteria pollutant emissions in the Valley 80 percent since 1980. Despite such significant emissions reductions, the Valley remains in extreme non-attainment of the federal 8-hour ozone standard and non-attainment for the federal PM_{2.5} standard, primarily because of Valley geomorphology and meteorology, both of which accentuate the formation and retention of summertime ozone and wintertime particulate matter (PM_{2.5}). While regulations implemented over the past few years have achieved significant reductions, they are coupled with much higher costs to the regulated industry, which can affect local and regional economies.

However, the District, as a public health agency, is still responsible for reducing pollution levels in the Valley to acceptable federal standards. While the *2008 PM_{2.5} Plan* projects attainment by 2015, attainment of the ozone standard requires a 75 percent reduction of NO_x emissions in the Valley, which requires additional time and development of new technologies. Because of the challenge that the Valley faces with regard to ozone pollution, the *2007 Ozone Plan* relies on a dual path strategy for reaching attainment; current and likely future technologies to reduce emissions through regulatory measures as the primary path and non-regulatory path that relies on innovative measures and programs for emissions reductions, reaching out to Valley residents and businesses to voluntarily reduce emissions through grant-supported emission reduction programs, daily activities, and business practices. Because stationary sources in the Valley are becoming extremely well-controlled through ongoing regulatory measures, it is this non-regulatory secondary path that is critical for expediting attainment ahead of the 2024 federal deadline. District staff adopted the term “Fast Track” to describe the suite of potential measures and activities along this accelerated path to attainment and the District Governing Board adopted the Fast Track Action Plan on June 21, 2007.

The three components of the Fast Track Action Plan are:

- 1) Ensuring that the California Air Resources Board (CARB) and Federal Environmental Protection Agency (EPA) expedite effective regulations to reduce oxides of nitrogen (NO_x) emissions from mobile sources, which account for 80 percent of the total NO_x emission in the Valley;
- 2) Achieving a significant increase in incentive funding through a variety of sources to encourage expeditious and cost-effective emissions reductions from un-regulated sources or regulated sources prior to rule deadlines. For example, more stringent federal and state regulations have made new vehicles much cleaner than their older counterparts. Additionally, new state regulations will require the turnover of previously un-regulated equipment, such as heavy-duty off-road vehicles, by deadlines prescribed in the new regulations. However, these reductions are not realized quickly enough, and, in the case of some types of vehicles, are not realized at all. The District is advancing the effort to achieve these “surplus” emissions reductions through the aggressive pursuit of additional incentive funds, which support a variety of incentive programs, including a

number of applications submitted under the Federal American Recovery and Reinvestment Act of 2009 (ARRA) for additional funding. To date, over \$230 million in incentive funds have been distributed within the Valley for a total emissions savings of over 65,000 tons of NO_x, volatile organic compounds (VOC), and PM10.

- 3) Developing Fast Track emission reduction measures to provide Valley residents, businesses, and local governments with opportunities to voluntarily participate in the attainment of cleaner and healthier air in the Valley, including: energy conservation, alternative energy, green contracting, green fleets, truck replacement/retrofit/repower, short sea shipping, high-speed rail, heat island mitigation, episodic/regional controls, and inland ports.

The District has successfully initiated actions within all three components of the Fast Track Action Plan; however, it is the third component that is the impetus for initiating the Regional Energy Efficiency Strategy (REES).

A growing body of research and case studies, primarily focusing on greenhouse gas (GHG) reductions, indicate the significant potential that exists for GHG reductions in energy efficiency and conservation activities through new “green” technologies and retrofits of older buildings. While GHG emissions are a significant component of pollution generated by the combustion of fossil fuels for electricity generation², the same electricity generation produces criteria pollutant emissions, specifically oxides of nitrogen (NO_x) and sulfur (SO_x)³. These ozone precursors, while lesser by volume than GHG emissions, when combined with climate in the Valley and geomorphology, contribute to significant negative health effects for Valley residents. The District will develop the REES to encourage emissions reductions through a broad range of energy efficiency activities throughout multiple sectors of the Valley. This strategy is yet another mechanism to accelerate District attainment of federal air quality standards and provide cleaner air for Valley residents.

Electricity, Air Quality & Public Policy

California has a long track record in pioneering energy efficiency and renewable energy technology, policy, standards, and regulations. As U.S. Secretary of Energy Chu points out, per capita electricity consumption in California has stayed flat for the past 30 years yet rose 40 percent in the rest of the United States, attributing this to pioneering

² 56% of electricity produced in California is done so through the combustion of fossil fuels. Source: eGRID2007 Version 1.0, Year 2005 Summary Tables (created September 2008).

³ While calculation of emissions rates vary by methodology and geographic extent, estimates using eGRID2007 Version 1.0, Year 2005 Summary Tables for the CAMX subregion (generally California), on average 714 lbs. of CO₂, 0.6 lbs. of NO_x, and 0.5 lbs. of SO_x were emitted for each MWh of electricity generated.

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

scientists such as Arthur Rosenfeld, now a member of the California Energy Commission⁴. California has the lowest per capita energy usage in the U.S.⁵ Despite that, the State of California is the 2nd largest electricity consumer and 2nd largest producer of GHG in the U.S.⁶; given that California has the 7th largest economy in the world⁷, these facts are no surprise.

With strong leadership, California has made a commitment to lead the nation and the world in fighting global climate change by reducing GHG emissions. This will be accomplished through watershed California legislation, the Global Warming Solutions Act of 2006, also referred to as Assembly Bill 32 (AB32), to reduce California GHG emissions to 1990 levels by 2020. The California Air Resources Board on December 11, 2008 adopted the Scoping Plan, which lays out the aggressive implementation of the. Both mobile and stationary sources of GHG emissions are targeted in the Scoping Plan. To meet AB32 goals, the Scoping Plan requires that GHG emissions from California transportation fuels be reduced 10 percent by 2020, with further reductions thereafter. To meet this mandate, CARB adopted the Low Carbon Fuel Standard on April 23, 2009, which is the first major regulation in the series of rules that will be necessary to implement the AB32 Scoping Plan.

GHG reductions through efficiencies in the generation of electricity and end-user consumption are also a key element of the Scoping Plan. Within the Scoping Plan and strategic plans brought forth by the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC), energy efficiency was deemed first in the “loading order” of energy “sources” that would lead the way to achieving AB32 mandates. While the focus of the Scoping Plan is the far-reaching reduction of GHG, the collateral benefit of energy efficiency and other GHG reduction measures is the inherent reduction of criteria pollutant emissions as a result of less fossil fuel combustion to generate electricity.

Certainly, reducing overall energy use is important within the scope of reducing GHG, and the District is in full support of that objective; however, for maximum air quality benefits, the District and the REES must focus additional attention on reducing peak energy demand during the summer ozone season. Criteria pollutant emissions during the summer are especially detrimental to air quality in the Valley; the compounding effect of increased sunlight in the presence of higher levels of NO_x and VOCs, partly as a result of increased energy demand for cooling, ventilation and refrigeration during extreme temperatures, accelerates the production of ozone. While the base-load mix of

⁴ Charles, D. (2009). "Leaping the Efficiency Gap." *Science* **325**(5942): 804-811.

⁵ http://energyalmanac.ca.gov/electricity/us_per_capita_electricity_2005.html.

⁶ Texas ranks 1st in both categories. Source: http://www.eia.doe.gov/emeu/states/_states.html

⁷ *World Economic Outlook Database*, International Monetary Fund, 2009

resources used to produce electricity in California makes for the cleanest statewide energy production in the United States⁸, California must still rely on older, less-efficient peaker plants, which tend to emit more pollutants, to meet peak electricity demands as summer temperatures rise. The use of peaker plants, especially in the Valley, adds significantly to the criteria pollutant emission at a time when minimizing ozone precursors is essential for the health of Valley residents. A secondary, but no less important factor of excessive peak demand during the summer is the possibility of insufficient supply to keep critical cooling and life support systems operating. Without a sufficient supply of peak power during the hottest part of summer many cooling systems may require backup diesel generator power, which can severely impact air quality. Such was the case during the rolling blackouts that occurred in the summer of 2000. During that time, air quality readings reached historically high levels as critical cooling systems required back-up power causing increased emissions in the stagnant meteorology of the Valley summer.

Minimizing the need for excessive peak power minimizes the pollutant emissions associated with that demand. Thus, the REES will emphasize the need for reduced energy consumption during those times when air quality is most impacted.

Regional Energy Efficiency Strategy Initiation

In January 2009, District staff initiated program development in the “green technology” Fast Track emissions control measures, specifically: green contracting, green fleets, alternative energy, energy conservation, and heat island mitigation. Subsequent to those program outlines being presented to the Fast Track Task Force and the Air Quality Work Group, Congress passed the American Recovery and Reinvestment Act of 2009. This legislation dedicates approximately \$45 billion to energy projects and programs, nationwide; of that, California is expected to receive approximately \$3.7 billion. The District determined immediately that the best way to initiate long-term significant emissions reductions in the Valley related to energy use and renewable energy sources was to ensure that the Valley received its share of the stimulus funds to be distributed to California. District staff in the Emissions Reduction Incentive Program (ERIP) were quick to initiate grant applications related to alternative fuels and alternative vehicles, as well as additional diesel engine replacement funds (DERA) made available through ARRA funding. To date, these efforts have secured \$7.2 million dollars in grant awards, thus furthering the District mission of healthy air and a higher quality of life for Valley residents. These additional funds also come at a time of economic distress and will undoubtedly help to stimulate the regional economy.

In addition to providing additional funding opportunities for District grant programs, the ARRA has emphasized the interest and motivation to re-think the use of energy today

⁸ eGRID2007 Version 1.0, Year 2005 Summary Tables (created September 2008).

and in the future and builds upon with the goals of AB32. All of these events, together with a struggling economy and high unemployment, have created a unique opportunity to re-examine and strengthen our energy future in the Valley. This increase in state and national priorities toward a more sustainable energy future will serve to amplify District efforts to reduce criteria pollutant emissions through energy efficiency and renewable energy in the Valley and meet ozone attainment well ahead of 2024. As a regional public agency, the District is primed to take a leading role in promoting energy efficiency and clean energy in the San Joaquin Valley.

While ARRA funding opportunities are monetarily and politically significant, as a specific funding source they will be relatively short-lived; all ARRA dollars must be spent and projects must be completed by September of 2012. This “burst” of funding will however provide the District and the region the monetary and political incentive to build a strong regional infrastructure of programs and physical resources necessary for long-term energy and air quality benefits in the Valley.

The importance of a regional approach to energy efficiency is emphasized in a recent report by McKinsey & Company⁹. This extensive report: (1) documents the potential for greater efficiency in non-transportation uses of energy; (2) identifies barriers to realizing such energy efficiency gains; and (3) provides practical solutions to unlock the potential energy efficiency gains, which are significant. The report identifies five holistic elements that are needed to unlock the full potential of energy efficiency:

1. “Recognize energy efficiency as an important energy resource that can help meet future energy needs, while the nation concurrently develops new no- and low-carbon energy resources;
2. Formulate and launch at both national and **regional levels** an integrated portfolio of proven, piloted, and emerging approaches to unlock the full potential of energy efficiency;
3. Identify methods to provide the **significant upfront funding** required by any plan to capture energy efficiency;
4. Forge greater alignment across **utilities**, regulators, **government agencies**, manufacturers, and **energy consumers**; and

⁹ *Unlocking Energy Efficiency in the U.S. Economy*, McKinsey & Company, 2009. From the Central Conclusion of report, “Energy efficiency offers a vast, low-cost energy resource for the U.W. economy – but only if the nation can craft a comprehensive and innovative approach to unlock it. Significant and persistent barriers will need to be addressed at multiple levels to stimulate demand for energy efficiency and manage its delivery across more than 100 million buildings and literally billions of devices. If executed at scale, a holistic approach would yield gross energy savings worth more than \$1.2 trillion, well above the \$520 billion needed through 2020 for upfront investment in efficiency measures (not including program costs). Such a program is estimated to reduce end-use energy consumption in 2020 by 9.1 quadrillion BTUs, roughly 23 percent of projected demand, potentially abating up to 1.1 gigatons of greenhouse gasses annually.”

5. Foster innovation in the development and deployment of next-generation energy efficiency technologies to ensure ongoing productivity gains.” [emphasis added]¹⁰

The findings of this report emphasize the basic premise of the regional approach the District will develop with the REES. The District will: (1) work in a regional framework to educate energy users as to the financial and air quality benefits of energy efficiency, identifying regional barriers that have prevented maximum utilization of energy efficiency options in the past; (2) work closely with Valley utilities, other public and nonprofit agencies, and local energy experts to leverage the maximum support, services, expertise, and funding for unlocking energy efficiency potential; and (3) develop a reliable and sustainable funding stream to incentivize energy efficiency and encourage development and utilization of new energy efficiency technologies.

Components of Regional Energy Efficiency Strategy

The Regional Energy Efficiency Strategy will be developed through a coordinated and collaborative process that will engage regional partners and stakeholders, including potential recipients of proposed tools and programs. Collaboration with partners with similar goals and ideals regarding a clean-energy Valley will maximize District efforts and emissions reductions for the Valley. A partnership with the San Joaquin Valley Clean Energy Organization (SJVCEO) and coordination with the major utility companies will be critical in kick-starting the REES; the partnership deliver energy efficiency services and provide administrative assistance to small local jurisdictions¹¹ in the Valley that are eligible for ARRA Energy Efficiency and Conservation Block Grant (EECBG) funding. Coordination with the utility companies will maximize effectiveness of both ARRA monies and utility funds for energy efficiency.

In establishing the REES, it is not the intent of the District to duplicate or take over the efforts of others; rather, the District will help to coordinate regional efforts and determine where District resources and expertise can best add value to existing programs and resources, perhaps fostering new and broader regional perspectives for the sustainable energy future of the Valley and its residents. Given the existing resources and expertise of the District, and in coordination with partners, the District is in a position to function as facilitator for developing regional energy efficiency programs and strategies for residents, businesses and local governments. Partnerships and coordinated outreach will be critical to meeting the goals of the District and the Valley in maximizing sustainable emissions reductions now and in the future.

¹⁰ *Unlocking Energy Efficiency in the U.S. Economy*, McKinsey & Company, 2009. Executive Summary, pages xi-xiii.

¹¹ These jurisdictions include incorporated cities and towns with populations less than 35,000 and counties with total unincorporated populations of less than 200,000. There are 45 such small cities and 6 such small counties within the jurisdiction of the Air District.

District staff have preliminarily identified three major components that will be necessary to build a strong and comprehensive energy program: 1) Outreach, education and information; 2) development of effective energy decision-making tools and programs; and 3) increased grants and incentive funding for energy efficiency improvements.

Outreach, Education & Information

The primary focus of the REES, in coordination with regional partners, will be to reach out to Valley residents, businesses, and municipalities to inform them of energy efficiency opportunities that will not only reduce valley emissions, but in most cases will result in lower energy costs – a “win-win” opportunity. The District can serve in this educational capacity through both broad and targeted outreach components.

District staff have already integrated components of energy efficiency outreach into the Healthy Air Living (HAL) campaign, which has been expanded to an all-year effort. Beginning with the Summer 2009 HAL Business Summits and HAL Air Quality Chats, staff provided information relating air quality and energy efficiency and provided basic energy efficiency strategies for everyday energy savings.

As the REES develops, staff will expand opportunities for outreach to target other segments of the Valley population, including but not limited to: local governments, minority small businesses, neighborhood groups, and regulated source groups in the industrial and agricultural sectors. This targeted outreach will help to focus resources to those sectors that either need the most assistance or that have significant potential for energy savings through energy and resource efficiencies.

The District can also serve as a significant resource for tracking the latest information, programs, grants and rebates associated with energy efficiency and conservation. The District will develop and maintain a comprehensive website and database, linking users to existing and new programs at the regional, state and federal levels.

A valuable informational and analytical tool that the District will pursue as part of the REES will be a regional analysis of potential energy efficiency savings and GHG abatement opportunities by sector, similar to studies released by McKinsey & Company in 2009¹² and 2007¹³, respectively. These studies have proven to be pivotal information sources for policymakers and others to quantify and visualize the balance of measures necessary for GHG abatement related to reducing the effects of global climate change.

¹² *Unlocking Energy Efficiency in the U.S. Economy*, McKinsey & Company, 2009.

¹³ *Reducing U.S. Greenhouse Gas Emissions: How much at What Cost?*, McKinsey & Company, 2007. Central Conclusion: “The United States could reduce greenhouse gas emissions in 2030 by 3.0 to 4.5 gigatons of CO₂e using tested approaches and high-potential emerging technologies. These reductions would involve pursuing a wide array of abatement options available at marginal costs less than \$50 per ton, with the average net cost to the economy being far lower if the nation can capture sizable gains from energy efficiency. Achieving these reductions at the lowest cost to the economy, however will require strong, coordinated, economy-wide action that begins in the near future.”

Specifically, the most recent 2009 study, quantifies the potential national net cost savings from energy efficiency measures, which are a critical component of overall future GHG abatement. This same information, compiled and evaluated on a regional level specific to the Valley, will provide similar quantification and visualization benefits.

Currently, the District plays a vital role in the collection and inventory of emissions and emissions reductions in the Valley; the District will expand the use of this expertise through the REES in developing this tool. Much of the energy use in the Valley is tied to agriculture and water distribution. The comprehensive analysis will help in identifying the efficiencies to be gained within this vital sector of the Valley economy. As an informational tool, the analysis will help to educate the general public as to the effect that end-use energy efficiency can have on individual energy cost savings and regional air quality. To complete such an analysis, the District will look to the expertise of Valley colleges and universities, as well as regional energy efficiency experts.

Decision-making Tools & Programs

The regulatory arm of the District has historically focused on stationary pollution sources in the industrial and agricultural sectors. However, because of the extreme non-attainment status, the District must make every effort to capture as many emissions reductions as possible outside of the traditional stationary sources. The District has tapped other sectors for potential reductions, including the development, municipal, commercial, residential, and transportation sectors – some through regulation and some through incentives.

Through the REES, the District will develop a variety of tools and programs to assist multiple sectors of the Valley in reducing energy consumption, criteria pollutant emissions and GHG emissions, all while saving money for energy end-users, in most cases. The first step in providing the most efficient tools and assistance will be to facilitate intense coordination and understanding of other programs at the onset of the REES development.

The District, in cooperation with its regional partners, will develop energy efficiency products and strategy templates for multiple sectors within the Valley, including the residential, commercial and municipal sectors. Especially in the municipal and commercial sectors, where vehicle fleets are used in everyday operations, the District will develop comprehensive emissions reductions measures beyond energy efficiency to include strategies to modernize existing fleets or build new fleets with “green” transportation options. As documented by existing District grant programs for mobile sources, significant emissions reductions are obtained through transportation efficiencies. By understanding the needs of each sector, each template will economize energy savings and facilitate the maximum use of expertise, grants, tax incentives, and rebates offered by the District and others.

The first and most time-sensitive task at hand in providing vital assistance to small jurisdictions in the Valley will be in the initiation of a partnership with the San Joaquin

Valley Clean Energy Organization (SJVCEO). This partnership will facilitate the disbursement of funds made available to small cities and counties through the American Recovery and Reinvestment Act of 2009. Both the District and the SJVCEO have worked closely with the CEC to develop guidelines for disbursement of these ARRA funds to the maximum benefit of the Valley. Given the fiscal constraints of small jurisdiction in economically-challenging times and the extensive reporting requirements imposed by the acceptance of ARRA funds, the partnership advocated for a regional approach in the application process; a process that will take advantage of centralized program development and reporting methodologies. A multi-jurisdictional approach will not only provide greatly needed assistance to local jurisdictions in an effort to utilize ARRA funds through application writing, program assessment and grant administration, but will also maximize energy efficiency efforts in the Valley. This first task will lay the groundwork and create the necessary infrastructure and professional relationships to develop more expansive programs that continue the sustainable energy goals of the District and the Valley for years to come.

Another opportunity presents itself in the residential sector. Within the residential sector, there is a significant potential in the programmatic evaluation of energy efficiency retrofit options. Research shows that “70 percent of the GHG emissions related to single-family envelope energy consumption can be attributed to homes built before California had an energy code (1983).”¹⁴ The comprehensive analyses conducted for these studies show that based on the age of a home, the construction type, and the geographic location of a home, a likely set of envelope improvements and equipment upgrades exists that are cost-effective and will significantly reduce GHG emissions through energy savings. Expansion of this modeling over entire neighborhoods of like-homes makes for “efficient” energy efficiency, as opposed to house-by-house evaluation. Modeling for the City of San Joaquin, west of Fresno, shows that through a comprehensive retrofit program as described above, the City could reduce that portion of its carbon footprint attributed to space heating and cooling, water heating, and lighting by 45 percent, or 1,961 tons of carbon per year.¹⁵

Given the significant emission reductions potential in a comprehensive residential retrofit program, the District will pursue the expansion of such a program on a regional basis into the Valley. ARRA funding through the CEC State Energy Plan offers a timely opportunity to kick-start such a program in the Valley. The CEC has identified that \$96 million will be offered statewide for development of comprehensive residential and commercial retrofit programs that will take advantage of the programmatic efficiencies acquired through economies of scale in regional programs. The District, SJVCEO and private-sector companies specializing in energy efficiency are actively pursuing these

¹⁴ *Meeting AB 32 – Cost-Effective Green House Gas Reductions in the Residential Sector*, ConSol, August, 2008.

¹⁵ *Program Advancing Community Efficiency (PACE): Sustainable Home Retrofit Model*, ConSol, 2009.

opportunities for the residential and commercial sectors in a comprehensive retrofit program.

Grants & Incentives

The District actively seeks every opportunity to apply for grants and provide incentives that are consistent with the overarching need to reduce criteria pollutant emissions in the Valley. Through the incentive program, the District is able to reach out to mobile source operators to reduce emissions. Since the announcement of ARRA funding, District staff have taken every opportunity to apply for additional funding, especially for those funds dedicated to diesel mobile sources and infrastructure for alternative fuels and alternative vehicles. District staff is actively seeking potential partnerships with the public and private sectors to apply for additional ARRA funding. These partnerships will help to ensure that the Valley establishes an infrastructure of renewable energy resources for a sustainable energy future.

In support of the District partnership with the SJVCEO, District staff is prepared to provide support services to small jurisdictions seeking ARRA assistance and interested in maximizing their energy efficiency efforts through a regional approach, thus allowing a greater participation level of Valley jurisdictions. Likewise, for application opportunities beyond those available as ARRA funds, public and private partners can look to the expertise of District staff for technical assistance in the grant application process, letters of support from the air quality perspective, and grant administration for regional partners.

For the long-term, the District will build a broad spectrum of assistance options for all sectors of the Valley expanding as much as possible into energy efficiency and renewable energy. It will be important for the District to foster and maintain its regional partnerships and infrastructure to maximize the effectiveness of all assistance options.

Strategy Development Process & Budgetary Implications

In order to take advantage of extremely time-sensitive opportunities presented by the release of ARRA funds, District staff have initiated components of the REES. ERIP, Policy and Planning staff are well-connected to ARRA and other grant opportunities for energy efficiency, renewable energy, and alternative fuels and vehicles. Staff have been working closely with the California Energy Commission and potential regional partners to establish the most comprehensive and efficient method for making sure that the Valley receives its share of ARRA energy efficiency and renewable energy dollars. The partnership with the SJVCEO and IOU's will facilitate just that, with maximum energy efficiency and emissions reductions potential.

Public Process

With that groundwork laid, District staff will seek further input and acceptance for the REES from Valley stakeholders, including, but not limited to: regional energy partners,

utility companies, representatives of the commercial, building, and municipal sectors, and members of the general public. To this end, District staff will conduct a public workshop in September 2009. After inclusion of comments from Valley stakeholders, staff will prepare the strategy document for Governing Board consideration in November 2009.

Staffing & Budget Implications

Staff anticipates that the initial phase of ERIP assistance related to ARRA funding for small local jurisdictions, including application processing and ongoing reporting, will be covered by the administrative budget allowed in the State and Federal grants provisions.

The proposed CEC guidelines for distribution of ARRA funds to small local jurisdictions, or their regional representative, require that payments of funds will be made on a reimbursement basis after the recipient submits the appropriate invoice(s) to the CEC. Unless this is revised in the final Commission-approved guidelines, the agreement of the District to act as “applicant” for multiple local jurisdictions will require the initial outlay of District monies to purchase energy efficiency equipment or services for each jurisdiction, prior to CEC reimbursement. The proposed guidelines also stipulate that 10 percent of the award agreement amount will be withheld as retention until the District submits a final report and the CEC determines that the project has been satisfactorily completed.

Above and beyond the grant application and evaluation responsibilities of the ERIP staff, general management and coordination of activities will require: 1) the coordination and development of long range energy efficiency tools and programs to be developed to carry out District energy efficiency goals; 2) the ongoing policy coordination with State and Federal agencies to maximize opportunities for continued support and funding of energy efficiency programs and projects; 3) continued understanding of ever-changing state and federal energy policy and programs; and 4) continued outreach to Valley residents, businesses, jurisdictions, and regional partners.

Implementation

After the initiation of the District-SJVCEO partnership to assist local jurisdictions in applying for and administering ARRA funding for energy efficiency, the District will build on the relationships and programs formed during this first step and begin to expand opportunities for energy efficiency in other sectors of the Valley. Establishing the informational products, including a comprehensive website, will be a critical first step to assist Valley residents and businesses in obtaining and understanding valuable information regarding their opportunities for energy efficiency and energy savings. The following is a preliminary implementation schedule for the REES:

By September 2009 – Evaluate the opportunity for regional partnership and application of comprehensive residential and commercial retrofit program funding

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

DRAFT Regional Energy Efficiency Strategy

September 2, 2009

through CEC SEP ARRA funding opportunity. If viable, submit application by November 2009. If funded, administration of grant will continue through 2012.

By November 2009 – Submit regional application to CEC for ARRA small jurisdiction EECBG Program. If application is accepted and awarded, administration of grant will continue through 2012.

By February 2010 – Roll-out of energy efficiency and renewable energy website with information, links and tools.

By late 2010 – Completion of San Joaquin Valley Energy Efficiency Opportunities Evaluation.

Ongoing – Continue energy efficiency outreach and education to all sectors of Valley; monitor energy efficiency savings by participating entities; monitor emissions reduction attained through energy efficiency measures.

2011 and beyond – Expand programs initiated through the ARRA funding opportunities; continue monitoring activities.

Yearly – Produce annual report identifying emissions reductions, financial statements, and description and effectiveness of outreach and tools.

Conclusions

The District will make every effort to seek out those win-win opportunities for non-regulatory emissions reductions and energy efficiency; most actions will result in cost savings to the energy user and reduced emissions for the Valley. While the capital cost for renewable energy and alternative fuel sources may be high, the emissions reductions potential are also important. Through the availability of ARRA funding and additional incentive programs, the District can provide assistance to potentially defray some of those capital costs where such projects or programs provide benefits to air quality.