

TESTIMONY OF THE PROGRESS AUTHORITY

TO

HOUSE REPUBLICAN POLICY COMMITTEE

Good afternoon, members of the committee. I thank you for the opportunity to present testimony. My name is Anthony Ventello, Executive Director of the Progress Authority. We are an economic development agency chartered in Pennsylvania as a general purpose authority, industrial development authority and industrial development corporation, focused by county contract in all of Bradford and Susquehanna Counties. We are certified by the Commonwealth for all Pennsylvania economic development programs. We are the local grassroots facilitators of investment and employment enhancement.

Approximately 2 ½ years ago, we were much like everyone else in need of educating ourselves about natural gas development. Unlike western PA, we were not familiar with the industry, its terms, techniques, and overall economic impacts.

As you know, western PA has been home to conventional and now unconventional natural gas drilling. The first oil well is claimed to have been drilled in Titusville over 150 years ago. Because of its heritage, we felt that viewing what was evidenced in western PA would not clearly exhibit the short-term economic impacts of a shale gas play such as the Marcellus. The Progress Authority staff and board members traveled with the Bradford County Commissioners, Penn State Ag Extension agents, Conservation District and others to Wise County, Texas. This was done because the Barnett Shale gas play was approximately 5 years into its development, and Wise County, Texas was similar in demographics to Bradford and Susquehanna Counties. In fact, we have formed a friendship with Wise County Commissioner Kevin Burns, who has been to Bradford County on 2 occasions and is coming again in June. We experienced every aspect of community impacts and natural gas drilling. Wise County officials and the Mayors of Decatur and Bridgeport, Texas were gracious to us. Needless to say, we were clearly overwhelmed with information and specifically, the economic prosperity with the drilling activity. We also had to translate the Texas experience to our Pennsylvania circumstances. Issues such as topography,

climate, land use, demographics, regulations and governmental structures had to be considered and evaluated to translate possible outcomes.

The Marcellus play has changed our lives. It dominates all local conversations and agendas. The gas field development obviously started with the leasing frenzy, which has escalated from \$25.00 or less an acre to \$5,700 - \$8,000 an acre, and now we are hearing of some leases totaling \$15,000/acre. In many leases, the leasing bonus payment exceeded actual land value. This leasing impact in a down economy provided much needed money to the region. In fact, some local banks developed special products to attract gas lease deposits. One local bank received approximately \$48,000,000 in new deposits over a 3-month period. People were paying off loans and requiring deposits in interest bearing and time accounts. There was little borrowing as banks tightened and no safe investment window for banks existed. And of course lack of activity means fewer bank fees and interest; therefore, these deposits were causing profit "problems" for the banks, as they cost them money. Perhaps this could be labeled as a "good" problem.

We then experienced the early development, or exploratory stages of drilling. Each natural gas company has their own business model, which they feel best suits their goals. It has to do with leasehold areas, well configurations, proximity to infrastructure, seismic data, and numerous other factors. We are now well past the early stages, and what also accelerated gas field development was the shut down of unconventional drilling in neighboring New York State, thus intensifying activity and focus in Pennsylvania's Marcellus formation.

We have been encouraged to develop working relationships with the natural gas companies in a greater effort to help facilitate and understand their needs, and involve our local businesses. Our relationships with Talisman, Chesapeake and Chief have been excellent. I can gladly report that economic impacts have gone beyond any expectations. Many small businesses have had their need for services increase; for example, the local business that provides cleaning supplies to our office building is overwhelmed with demand for product due to the commercial and residential demand. Local restaurants, retail and commercial suppliers, trucking, fuel, lubricants, repairs, tires, machine shops food, etc. – everything imaginable has had substantial

increases in new business. Additionally, almost daily calls come from relocating businesses that have a relationship with the industry such as oil field supply, site services, excavating, pipeline companies, and professional services. The demand for useful commercial sites is at a premium. Local entrepreneurs have bought equipment and converted their efforts and I know of catering at well sites from numerous food services. Changes in health care delivery with occupational medical professionals are now being developed. Our large manufacturers are involved in production of products that are used in the natural gas industry. In fact, the Progress Authority participated in the expansion of a local plant that recycles the rare earth metals from drill bit heads and manufactures the carbide cutting tips. One local jeweler is making oil rig jewelry, which is selling like hot cakes.

Contrary to many peoples' belief, many local people are now being hired – supported by Penn College's Marcellus Shale Work Force Needs Assessment, which for the first time actually quantified the work force impacts by measurable activity such as drilling rig counts.

Another major economic impact is the increase in railroad utilization. This new demand not only has increased rail activity, but supports an industry which utilizes large and heavy materials, thus helping with the reduction of trucks entering the county for bulk delivery. Substantial new investment by Lehigh Railway Inc. has been ongoing on a railroad which otherwise was all but abandoned by Norfolk Southern. Continued improvements and rail related property development is ongoing, and the recent acquiring of a little used short-line by Reading & Northern for the purpose of natural gas product transport. Millions are being reinvested in our railroad system.

The Progress Authority was the competitive recipient of funds from the DCED known as Regional Investment Marketing Program. This program focused on the specific regional attributes to target new business opportunities. Obviously, natural gas was a key focus. The state's Office of International Business Development urged the Progress Authority to attend the largest oil and gas expo in North America known as GO EXPO in Calgary Alberta, Canada. The mission was to promote the attractive elements of the Marcellus Gas Play and prospect oil field service companies to come to our area. We were also hosted by Talisman Corp., which

familiarized us with the Canadian natural gas industry. This trip has secured Canadian companies in our area, but also exposed us to the immense economic impacts experienced via an oil and gas boom. It allowed us to understand the industry with a perspective from both international and long-term economic results.

A critical economic result has been the immense demand for commercial property and housing. We are now experiencing new construction, and these properties are limited to areas that have adequate infrastructure. I have personally met with numerous contractors and developers who intend to construct new commercial, industrial and residential units in the area. This has a substantial effect on local economics and tax base expansion. The Progress Authority is sponsoring Recovery Zone bonds to help finance a new 65 room hotel project in North Towanda, representing \$5.5 million of new investment. The limiting factor for new development is property with existing infrastructure – utilities, water, gas and electric. Hopefully these improvements can result from further demand.

When trying to emphasize the true economic impacts of the Marcellus Shale Gas Play, I believe it is critically important to point out the differences as opposed to the similarities of other gas plays in the United States and Canada. There have been numerous studies by accredited institutions which provide insight as to what may happen in the Marcellus based on what has resulted in the other shale plays. In most cases, these studies extrapolate data and attempt to forecast Marcellus impacts. Our research identifies the following differences.

Free hold minerals are at the base of the economic viability to landowners. This does not exist in all parts of the US and in fact, in Canada the minerals are owned by the Crown - thus the intense leasing activity and investment that affects individual property owners in northern Pennsylvania.

The Marcellus Shale gas quality has been 96 – 98% methane. This is due to very good thermal maturity of the shale. This eliminates down stream processing and added production cost. It is known as sweet gas, mostly free of hydrogen sulfide, which exists in other gas plays. It is pipeline ready and improves profitability. We observed wind socks on Canadian compressor plants which is evidence of sour gas.

Pipeline infrastructure exists with the Millennium Pipeline to the north, the Stage Coach connecting to the Tennessee Pipeline and project 300 upgrade; the Transco to the south with the proposed Marc I line connecting the major lines and creating a hub in the Marcellus region. Numerous other pipelines are being considered. The pipeline network that exists leads to the largest user of natural gas in the US, the east coast/megalopolis. The development of a hub in the northeast will allow for the wheeling of gas into numerous markets, thus expanding the sale and marketing of natural gas.

Quality and quantity of the play and market location are the key to the economic strength of the Marcellus play. Other broader financial variables go beyond the immediate production of natural gas to market. Oil and gas companies valuation includes natural gas reserves and land held by production, both of which enhances stock values beyond the immediate sale of natural gas. This will sustain drilling a lot longer in the Marcellus Region should natural gas values decline further. Of course, this is assuming no changes in regulation or excessive taxation. If the resource is taxed, careful consideration must be given to the amount and revenue returned to the host counties, school districts and municipalities who bear the financial burdens of impacts to infrastructure and communities. The majority of funding should be invested locally. With uprise of drilling this spring, substantial damage to local roads was experienced well beyond any municipal budget; although gas companies are attempting to restore the roads via bonding and agreements, clarification of funding specifically targeted for road repair must be finalized.

The Progress Authority has developed a special scope of work that for the first time attempts to quantify and measure the actual economic impact. This will go beyond previous studies that extrapolate information to our situation. The Progress Authority, in partnership with Penn College and Penn State University, has finalized a special study proposal which will build a model to measure impacts. Much like Penn College's workforce model based on a drilling rig count variable, the Progress Authority model will rely on specific measures, such as permit activity, water utilization, productive wells, leasing activity, etc. to harness the economic impact. I have attached a copy of the Special Analytical Scope of Work to this testimony. We are attempting to fully fund the project, which will provide very useful information to our

legislators, local governments, citizens and businesses about the economic impacts. The model will be built with analytical software so that it can be updated on a regular basis. The special study is projected to be completed in 18 – 24 months.

Perhaps one of the greatest long term impacts has yet to be determined or realized. This is the utilization of this natural resource in a value-added effort. The greatest concern of our industries today is the removal of rate caps for payment of electricity. A key component of exorbitant electricity costs is the lack of local generation. The Progress Authority is completing by the end of June 2010 a special study to investigate the options of local energy generation with natural gas as a fuel source.

Additionally, stable electric costs will sustain and attract new business investment, thus diversifying and strengthening the local business and employment sectors. Also, key manufacturers that utilize natural gas in their processes could be secured for greater investment and business diversity.

Finally, on June 26, 2010, The Authority and partners are sponsoring the first Northern Tier Business to Business Expo, to be held at the Troy Fairgrounds. This Expo is intended to expand business opportunities for local companies and build business relationships with the gas industry. With major sponsors secured, we have nearly 200 exhibitors who are excited at the opportunity to attend and network. Our primary indoor exhibits have been sold out.

A key measure of drilling activity is the filing of permit applications in 2009. Bradford County was 2 – 1 against any other County. There were 429 permits filed for 2009 and a recent count of 371 exist for approximately 3 ½ months of activity in 2010.

Finally, with the initiation of a new census old data cannot measure the impacts of this recent economic boom. However, the Center for Workforce Information and Analysis recently released a March 2009 to 2010 comparison and they reported the Bradford County unemployment rate has fallen from 10.0% to 7.4%. Knowing the activity level at this time, I believe it has fallen further as a result of interfacing with local businesses. Additionally,

Bradford County leads the state of Pennsylvania in new job creation with 2,000 more people employed than one year ago.

Thank you again for the opportunity to present our findings to the committee. I am available for any questions.

## **PROPOSED SPECIAL ANALYTICAL STUDY SCOPE OF WORK**

### **ECONOMIC IMPACT OF MARCELLUS SHALE DEVELOPMENT IN CORE MARCELLUS COUNTIES**

The Progress Authority in partnership with the Marcellus Shale Education Center (Penn College of Technology and Penn State Cooperative Extension) is proposing an analytical study to identify current and future county- and region-specific economic impacts of the Marcellus Shale Natural Gas Play.

The natural gas industry is evolving and transitioning into a definable long-term economic engine. Currently, all of the economic impact studies of Marcellus (even the MSC-funded Considine and Watson report) are extrapolations of data from similar gas field plays, such as the Barnett Shale in Texas and the Fayetteville Shale in Arkansas. Existing analysis efforts predict that the Marcellus Shale development is anticipated to be the largest single economic impact in this region's history. The study area will undergo a permanent change, mainly due to the revenues generated from the shale play.

The development of the Marcellus Shale natural gas resource will continue to significantly impact the study area. The core counties for the proposed study are Bradford, Susquehanna, Tioga, Sullivan and Wyoming counties. The economic impact initially experienced with the early stages of development has been and will continue to be far reaching. Economic analysis of the effects of natural gas investment is paramount to existing and future economic impact comprehension, and to effective planning to make this as economically beneficial to the affected counties and regions.

The 2009 MSETC 'Marcellus Shale Workforce Needs Assessment' was specifically designed to measure employment needs fundamentally tied to the level of gas well drilling activity, and predict future workforce needs associated with the industry. This proposed economic impact study will use similar methodology to estimate the level of future drilling activity within the study region, and dovetail with that 2009 MSETC report to validate and clarify ongoing activities in the study area.

Economic impact analysis typically relies upon standard input-output economic models, such as REMI or IMPLAN, which are built using secondary economic data representing existing local business relationships. Because the data sources within the models are several years old, the models work well when investigating existing economic activity within a community. But the analysis is weaker when investigating a new or rapidly growing industry which has not had a major prior presence in the community, since the data doesn't accurately represent those local economic relationships. That is the case with Marcellus Shale, which means the economic models need to be adjusted to more accurately reflect existing conditions. We will use several surveys to do this modification, and then use the modified economic impact input-output model (likely REMI, though possibly IMPLAN) to do the economic impact analysis.

The project team's analysis is specific to assisting the baseline of the existing local economy of the target counties. We will rely upon four surveys to collect specific local information about economic impacts, and use this information to adjust the economic impact model. The surveys will include:

1. Face-to-face interviews with the major natural gas companies operating in the study region (this is the same methodology used in the prior MSETC study), focused on level of drilling activity, pipeline construction and maintenance, local spending, community giving, and employment/payroll
2. Mail survey to 300 randomly selected landowners who have leased their gas rights, focused on where they spent their lease and royalty dollars
3. Mail and drop-off surveys of 700 gas workers, focused on where they spend their income
4. Mail survey to 1000 local businesses (e.g. hotels, restaurants, contractors, trucking firms, etc), focused on how their business activity has changed due to natural gas development

The analysis will include:

- Gas well permit requests/approvals/environmental permitting/building permits on a county-by-county basis
- Productive wells/yields/MCF/quality
- Current and expected leasing activities/royalty income on a county-by-county basis
- Employment and training demands
- Exploration, drilling activities, and pipeline development - rig counts/miles of pipeline/gas companies present and investment in the region
- Business activity (including oilfield service companies, tourism, trucking, and other local businesses)
- Local existing and new business opportunities and impacts
- Current direct economic effects from natural gas development (e.g. jobs and income), on a county-by-county basis
- Current indirect economic effects from natural gas development (e.g. multiplier effects, measured as jobs and income)
- Potential future direct economic effects from natural gas development (e.g. jobs and income), on a county-by-county basis
- Potential future indirect economic effects from natural gas development (e.g. multiplier effects, measured as jobs and income)

How communities prepare and react to the changes is of utmost importance and the underlying local economic analysis is the best source of decision-making data. The methodology for the analysis will be such that frequent updates to the study can be made so results can easily be updated. Basing the study's modeling methodology on the number of wells forecasted to be drilled is the best and most logical approach.

The value of a model to evaluate economic impacts will allow the understanding of investment. Understanding the impacts and industry trends will allow communities and businesses to embrace and maximize the economic impacts as well as understand and prepare short and

long-term industry direction. Initial gas producer support for the study has been realized and mutual partnership efforts will expose the true investment in this natural resource's development.

Timing: To be completed nine months after initiation of the project

Draft Budget: \$75,000