Testimony of David Allen, Executive Vice President, McKinstry Company

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INTRODUCTION

Good morning Chairman Murkowski, Ranking Member Cantwell, and other members of the committee. I am David Allen, Executive Vice President of McKinstry. Chairman, you met my brother Dean last summer at McKinstry while touring through Seattle; he sends his regards.

Thank you for the invitation to speak with you today about energy infrastructure.

I am here to share the lessons we've learned from more than 50 years of designing, building, operating, maintaining, and managing facilities across the United States. I represent the 2,000 men and women who work for McKinstry, made up of sheet metal works, plumbers, pipefitters, service technicians, accountants, energy engineers, construction managers, commissioning agents, data analysts, and more. This diverse set of crafts and skills have a common denominator - invention. No two buildings are alike, which requires an inventive culture to meet the evolving financial and operational needs of our clients.

This is a cornerstone to our growing energy efficiency practice, where we are called upon by cities, counties, states, hospitals, schools, campuses, and corporations to help manage their energy footprint. Often, we analyze current energy use and offer recommendations for improvement, other times we are solving age-old problems with new technology.

We needn't look further than a local school district for opportunity. K-12 schools are crippled with deferred maintenance and shrinking operational budgets in nearly every community across America. Energy efficiency projects are an attractive solution for many of our clients because health and life safety systems, so critical to classroom learning, are upgraded or optimized with little-to-no out-of-pocket funding. Infrastructure needs are addressed in the short term, and scarce operating dollars are freed up in the long-term to fund competing needs like teacher salaries, class-size reduction, or STEM programing.

I'm sure Senator Cantwell has said more than once before this committee, "if it can work in Washington State, where power is cheap and abundant, it really can work anywhere." And she is right.

Investing in approaches and technologies that make local communities more resilient, efficient, and productive should be the goal we all work toward together, across the aisle. Any responsible infrastructure legislation argued before congress must include funding to update our aging and failing power grid, prioritize conservation over consumption, and test market readiness through demonstration projects.

I assume the first point – that we must update our aging and failing grid -- will be thoroughly discussed by my industry colleagues today. Instead, I will use this time to focus on the two remaining areas for investment.

CONSERVATION OVER CONSUMPTION

The potential to make our built environment more energy efficient is virtually limitless. Approximately 80 billion square feet of non-industrial facility space uses 70% of the electricity in the United States. We believe half of that energy—from generation to consumption--is wasted.

A recent analysis by Portland, Oregon based economists at ECONorthwest, found that energy efficiency investments increase overall economic productivity across all sectors of the economy. Of course, reducing energy waste provides immediate benefit to homeowners, schools, hospitals and businesses as they save money on their energy bills, but these economists were interested in what happens when those saved dollars are otherwise spent by end-use customers. ECONorthwest found a significant macroeconomic effect from that spending that reverberates across the economy.

When you think about it, spending money on wasted energy is about the least productive thing we can do with society's capital. Eliminating energy waste, and freeing up that capital, allows people to spend in ways that improve the underlying productivity of the economy. In aggregate, this means more money for business expansion and job growth. Using sophisticated macroeconomic models and actual economic performance data from the states of Washington and Oregon, the analysis concluded that energy efficiency investments increase economic growth, increase job creation - and not just in the clean energy sector, but across all sectors of the economy -- and reduces income inequality.

We have enormous opportunities to gain productivity and efficiency with targeted and thoughtful approaches to public policy and funding that prioritizes conservation over consumption.

SMART AND CONNECTED COMMUNITIES

All of us in this room understand the magnitude of the energy grid problem. But it is precisely because of the magnitude that we often lose our ability to see how individuals can play a role in the solution. I encourage this committee to continue the precedent of inspiring innovation at the community level by sending clear market signals and funding them through demonstration projects.

The Northwest has been the beneficiary of previous demonstration investment. I can speak to the direct impact this has had on our business, and the communities where we work and live. The small energy management team we built up to support the smart-grid demonstration project five years ago is a tangible example of this. Fast-forward to today and that team has tripled in size and grown to become an integral part of McKinstry's future. That demonstration project, stemming from discussions such as this, catalyzed a unique partnership that would have been difficult to assemble otherwise. Working alongside utilities, national labs, research universities, startups and established technology companies, we moved smart grid from theoretical to proven. Now there are still many miles to go on this smart-grid journey, but it's important to recognize that out of this effort, and others like it, new companies were born, new products launched, and new engineered solutions were devised to address long standing problems. The lessons we learned from the smart-grid demonstration project have become the foundation for the next wave of innovation.

There are two areas of demonstration that we encourage this committee to consider:

1. Invest in rural, hard to reach communities. Energy costs are disproportionately high and fluctuate radically in many corners of our country where the centralized grid has limited reach. The challenges facing these communities are entirely different than those of urban environments. We must be open to new technologies and approaches to securing a reliable and cost-effective energy future. As an example, Costa Rica has been 100% off grid, using renewable energy, energy-efficient technology, and battery storage to meet their needs for almost a full year. We urge the committee to activate market receptivity of these off-the-shelf technologies across rural America through demonstration projects. No community should be left behind as we upgrade our energy infrastructure, and the best ideas should be encouraged to surface.

2. Tailor funding and legislation to fuel the shared energy economy through ECO district systems as federal demonstration projects. As mentioned previously, the most inefficient use of capital is energy waste, which usually comes in the form of waste heat. In an ECO district arrangement, one entity's waste heat becomes another entity's fuel source. We have a proven example of this in downtown Seattle. ECO district demonstration projects have the potential to significantly shift the utility

infrastructure paradigm, driving waste out of our built environment and ultimately increasing economic productivity. In addition, ECO districts interconnect smart buildings and smart systems - exploding the need for IoT, and American invention of new technology.

We have a responsibility to think differently about the development of our cities and incite exploration of shared infrastructure that requires multi-party cooperation for the greater good.

CONCLUSION

Thank you for the opportunity to discuss our thoughts on where investment in the energy economy is needed. I would be happy to answer any questions you may have.