Where do you reside in PA?
Who are you representing today?

- Myself (interested resident): 15
- Electricity Provider: 1
- Environmental Organization: 8
- EJ Community Advocate: 2
- Other: 13

Total: 48
Eligible Applicants

→ Electric Grid Operator
→ Electricity Storage Operator
→ Electricity Generator
→ Transmission Owner or Operator
→ Distribution Provider
→ Fuel Supplier

Are you an eligible applicant for this program?

- Yes: 12
- No: 25
- Not sure: 5
Draft Program Goal:
Support projects that will enable grid resiliency for communities, including physical upgrades to critical infrastructure, and deliver environmental and health benefits to Pennsylvanians in low-income and vulnerable communities in both rural and urban areas statewide.

Is there anything additional we should include in our goal statement?

- No
- No
- No
- Projects that incentivize and support transition to renewable energy.
- Important to define what is meant by grid resiliency.
- Safety and reliability
- Inclusion of equity as a goal.
- How do you work with internet connectivity? Any coordination?
Draft Program Goal:
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Is there anything additional we should include in our goal statement?

- Yes - perhaps in subsequent years, a statement around consumers and having software at home to monitor and participate in DR when the grid needs. Putting more control on with the end user.
- Maybe areas of particular applicability could include local emergency operations centers and first responder facilities, critical transportation infrastructure assets.
- I would remove the word “enable” and insert “substantially improve.”
- I would like to see an emphasis on the human capital issue. The workforce pipeline has not kept pace with the rate of recent retirements to even keep pace with previous levels, let alone an expansion of the grid.
- Vehicle to Grid interchange. 
- Diverse power grid to ensure resiliency and proper base load energy supply.
Draft Program Goal:
Support projects that will enable grid resiliency for communities, including physical upgrades to critical infrastructure, and deliver environmental and health benefits to Pennsylvanians in low-income and vulnerable communities in both rural and urban areas statewide.

| With off right of way trees being an outage driver, mitigating them merits further discussion. |
| Should the goal statement clarify that this is related to "electric grid critical infrastructure"? |
| "......and deliver environmental, health and economic benefits......" (economic benefits from workforce development, resiliency, etc.) |
| Preference to projects that offer multi-purpose uses / benefits. For example, a hydro-electric project may offer flood control, water supply, recreation, renewable energy, and energy |
| DER connectivity to enable load-side resilience even if the grid fails |
| Does the DOE funding program require projects to deliver environmental and health benefits or is DOE proposing to expand the goals of this program? |
Please rank these program objectives

1st: Protect urban and rural communities from the consequences of disruptive events

2nd: Deploy new projects in addition to the projects currently planned

3rd: Improve the health of PA residents with projects that reduce air emissions/greenhouse gases

4th: Site projects within Justice 40 areas or projects that primarily benefit Justice 40 communities
What other objectives should we consider?

- Develop demonstration projects that can be successfully replicated across Pennsylvania.
- Community input on siting, setbacks, safety planning.
- Shortening outage duration and frequency. Vegetation management falls by the wayside far too often which can expand infrastructure issues exponentially when coupled with aged infrastructure.
- Reliability
- Perhaps consider an equitable allocation of projects across the state and make sure not all $ are allocated to only certain areas within the state and attempt to make sure there is distribution between rural and non-rural areas.
- Need to think about this and respond later if possible.
- Prioritize local emergency operations centers and first responder facilities, critical transportation infrastructure assets, and resilient energy centers at schools and other community facilities.
- Support rooftop solar input into the grid, and electric car needs from the grid.
- Look at best practices across the USA and choose those most applicable to Pennsylvania.
What other objectives should we consider?

- Encourage deployment of microgrids to enhance resiliency and reliability for munis, hospitals, businesses, etc.

- New projects: add synergy programs that benefit communities. E.g., bike paths developed along transmission lines so tree cutting maintenance is shared. E.g., internet upgrade - coordinate resilience grid work - we want to charge AND use our phones,

- Objectives to work with local economic dev on smart initiatives. Goals for these federal dollars does not align with new development, whether that's housing developments that removes trees, (creating potential landslides) and grid connection.

Projects should benefit Pennsylvania based manufacturers. For example, solar, wind, and storage equipment made in Pennsylvania.
Rank the project criteria for evaluation (1 most important, 5 least important)

1st: Long-term Risk Reduction
2nd: Community Outcomes
3rd: Workforce Development
4th: Decarbonization
5th: Significant Matching Funds
<table>
<thead>
<tr>
<th>What evaluation criteria are we missing? What else should we consider in project evaluations?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental impact</td>
</tr>
<tr>
<td>Government-private sector collaboration</td>
</tr>
<tr>
<td>Synergy projects as mentioned earlier</td>
</tr>
<tr>
<td>Again I need to read over the complete plan to add any missing pieces</td>
</tr>
<tr>
<td>public-private partnerships</td>
</tr>
<tr>
<td>Working with local governments and local communities</td>
</tr>
<tr>
<td>Reliability is paramount</td>
</tr>
<tr>
<td>Small companies vs. large companiesUnder 4 million MWh’s</td>
</tr>
<tr>
<td>updated climate impacts</td>
</tr>
</tbody>
</table>
What evaluation criteria are we missing? What else should we consider in project evaluations?


Renewable sources.

Decarbonization impact to minimize future weather events.

Performance metrics and post funding goals achievement review.

Provide free energy audit for all non profits.

Flexibility for EDCs and other qualified applicants to partner with governmental and other stakeholders on priority public facility resiliency projects.

Preference to legacy (fossil fuel) energy communities...coal, oil, gas.
Which of the eligible entities should we prioritize for this program? Please rank

1st: Distribution Providers (Electric Distribution Companies)
2nd: Transmission Owners or Operators
3rd: Electric Grid Operators (PJM)
4th: Electricity Storage Operators
5th: Electricity Generators
6th: Fuel Suppliers
7th: All of the Above
How should we measure success? Are there specific metrics we should use?

- Track the money against the intended outcome. By those sub grantees you just had on the last slide.
- EJ40 criteria met# of hours of outage in state using a baseline
- A decrease in outage duration and frequency.
- Since the overall goal is to improve reliability and resiliency, the best metric would be how many disruptions were avoided. Like many other areas of emergency management, this is really difficult to quantify.
- Something that shows increased projected benefit over time. Maybe a cost benefit analysis based on 2022 and then 2052.
- Reporting progress in carbon reduction and resiliency over a longer time horizon
- Number, duration and affected population of outage. Also maybe type of impacted population- such as hospitals, etc.
- Was the project completed, completed on time and within expected cost estimate.
<table>
<thead>
<tr>
<th>Number of outages (as mentioned in presentation) decreases. Grid supports local input and needed output</th>
<th>How much end of life equipment is replaced? How much added capacity to the grid as the project goes on? Have the number of customers impacted by events reduced?</th>
<th>Survey of emergency responders and their description of community outcomes. You get more qualitative results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compare the number of power outages in an area with frequent outage issues before/after efforts. Also the timeframe to reinstate service after an outage</td>
<td>Decline in outages &amp; disruptions, especially in environmental justice communities; community satisfaction; community outcomes. Longer term: public health impacts</td>
<td>Number of FTEs created; Utility estimated restoration times with/without upgrades; List of impacts to energy justice measures and environmental justice communities.</td>
</tr>
<tr>
<td>As more distributed generation and micro-grids are added to improve resilience, just measuring utility outages will not provide a complete picture of whether the customers actually lost electricity supply. Need to make improve monitoring at the cust</td>
<td>Survey the end users/customers who may be impacted by the awarded project</td>
<td>Outage time weighted by the communities with the fewest resources to provide alternative to vulnerable individuals during outages</td>
</tr>
</tbody>
</table>
How should we measure success? Are there specific metrics we should use?

I would assume customers would experience better rates if this is a subsidy for infrastructure? Is this a consideration to keep PA competitive energy state? In 5 years time, is there anything that the PUC is hoping to achieve?

Use PJM data / info

Achieving reduced outage events by upgrading infrastructure. Reducing incompatible tree species while maximizing the establishment of compatible tree species and shrubs within the maintained Utility Right of Way while eradicating invasive plants.
How should DEP require that applicants inform us of how their projects benefit DACs? What data should be required? Please rank.

1st: Economic Analysis
2nd: Maps of Benefits
3rd: Demonstration of Community Interest
4th: Demonstration of Knowledge of Community
5th: Other (Please share ideas)
What types of grid infrastructure projects would be most beneficial to DACs? And why?

- Microgrids for libraries.
- Build new tie-points for redundancy, automated reclosers to isolate faulted lines. Porcelain replacements and animal protection.
- Update of equipment.
- Storage and micro grids in community facilities - they have more floods and urban heat island effects more often. If air quality monitoring could complement these projects.
- Design community specific needs since they can vary by so many factors.
- Work together as a community.
- Pumped Storage Hydropower offers multiple benefits including grid scale energy storage, water supply, recreation, flood control, tourism, visitor / educational centers.
- Sounds like a project for EDC's. They would know their territories.
- Public mtg such as this. The state could also start EJ task forces at the local level.
What types of grid infrastructure projects would be most beneficial to DACs? And why?

- Is it possible to capture the existing baseline in order to measure progress?
- Develop local EJ task forces to self-organize - create local energy facility audits
- Add capacity to hopefully provide more job/manufacturing opportunities.

Each year to determine if the previous grant application meets the community's expectations.
What are the best ways for DEP to report on progress and receive input on future grant rounds from DACs?

Community meetings - talk to your community members

Public meetings, in the community, in person if possible. Partner with community organizations to get the word out or co-host presentations.

A mix of holding a public meeting and surveys

In person visits with the community and grant recipients

Engage with local officials to ensure that residents are informed

Create yearly Accomplishment/History Reports of the $5 Billion/year allocation; continue this type of Public Meeting, yearly.

Surveys may not be appropriate for DCAs. You need to go directly to those affected

Is it possible to capture the existing baselines for these communities in order to measure improvements?

Newspaper notices / community meetings
What are the best ways for DEP to report on progress and receive input on future grant rounds from DACs?

Direct contact community meetings which include emergency response people with these events
Other than grid resilience, what else should we value as part of this program?

<table>
<thead>
<tr>
<th>Avoidance of potential disruptions.</th>
<th>Air quality, health benefits, decarbonization</th>
<th>Harden the grid from EMP pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility in proposed solutions to not overcommit to a particular solution. Inflexible proposals impose higher opportunity costs.</td>
<td>Potential to grow alongside/with new technological advancements</td>
<td>Energy Facility Audits so communities are sensitized to their own consumption and risks</td>
</tr>
<tr>
<td>Flexibility, scalability, future and reverse compatibility. (Plus clean, renewable energy; shift away from fossil fuels; community input/involvement; public health.)</td>
<td>Reducing risk of taking nuclear, coal offline until solar, wind, storage are sufficient to carry increasing demand, especially with cooling loads as summers heat up.</td>
<td>Link educational groups such Penn State with climate change on vegetation (such as ash borer,) and flooding/stormwater etc to help folks.</td>
</tr>
</tbody>
</table>
Other than grid resilience, what else should we value as part of this program?

- Establishing compatible tree and shrub species on the maintained utility ROW Corridor, invasive plant species management and protection or establishment of Riparian Buffers.
- PJM needs more resources to address current logjam of projects.
- Skilled workforce development for grid/distribution upgrades as we move forward with electrification.

Elevate anything that improves the “health of the grid” per se.
How and when should we seek public and stakeholder feedback on this program?

Public comment periods and public meetings like this one, at least annually. Also targeted outreach to key community stakeholders, particularly EJ advocates.

Comment period in advance of Year 2 since there is probably insufficient time prior to launching Year 1.

Survey after this year’s grant app to gain feedback on the objectives submitted - to help tailor next year’s application.

This session has been an excellent way to receive input. Love how you used menti.

As applications come in and before granted, then maybe depending on new applications submitted...but minim every 6 months or 50% of the annual fund allocation.

Accommodate 2 windows of stakeholder feedback per year and hold one public virtual meeting as this per year.

Thank you for the opportunity to weigh in.