ComEd Emerging Tech overview

✓ **Purpose:** Identify, test, validate and integrate the next generation of energy efficiency technologies and program delivery strategies into the ComEd EE portfolio

✓ **Goal:** Drive the evolution of the ComEd EE portfolio so that it continues to meet customer needs and energy savings targets cost-effectively

✓ **How we work:** Partner with organizations to identify, research and pilot impactful technologies and new program designs from across the industry
### Activity update

<table>
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<tr>
<th>In-Flight Pilot Projects</th>
<th>In-Flight Research Projects</th>
<th>Projects Completed Since 1/1/18</th>
<th>Project Partners &amp; Memberships</th>
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<td>18</td>
<td>13</td>
<td>19</td>
<td>40+</td>
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*Updated 01/12/2020*
Public website & submission portal

Showcase & Inform
Pages for background, past and current projects, upcoming solicitations, proposal submission guidance and FAQs

Increase Transparency
Users who create a profile have a dashboard that tracks submission status

Simplify & Organize
Simplified portal makes the submission process accessible for many types of submitters and manageable for our team

www.ComEdEmergingTech.com
Switched Reluctance Motors

✓ Old design enhanced by new technology breakthroughs

✓ High efficiency motors at small sizes (1-10 HP)
  ▪ More efficient and simple motor design
  ▪ Same dimensions as existing motor stock
  ▪ Cheaper production cost
  ▪ Integrated VFD controllability

Photo Courtesy of Software Motor Company
Switched Reluctance Motors

✓ Multiple applications
  - RTU supply fan motor replacement – efficient fan motor can reduce HVAC costs
  - Industrial conveyor motors – motors can sense load and reduce power usage when no product is present to be moved

✓ Collaboration with National Renewable Energy Laboratory (NREL)
  - Simulation Study comparing multiple rooftop unit retrofit/replacement options across 6 different building types
  - Developing Lab test procedure for industrial conveyor motors

✓ Initial results show 25-40% HVAC energy savings in RTU applications
  - Future pilot in-field demonstrations planned
Contact

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Sign up at www.ComEdEmergingTech.com

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