Massachusetts Electric
Investor Site Visit

4 March 2019
The US is a fast growing part of our portfolio

- Represents 45% of our asset portfolio
- Underscores our value proposition
  - attractive combination of asset growth and dividends
- While
  - delivering world-class operational and safety performance
  - maintaining a strong balance sheet
  - at the forefront of industry developments

### TOTAL ASSETS
As at March 2018

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Regulated</td>
<td>£37bn</td>
</tr>
<tr>
<td>UK Regulated</td>
<td></td>
</tr>
<tr>
<td>NG Ventures &amp; Others</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>US Regulated</th>
<th>UK Regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

### US RECENT FINANCIAL PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underlying EBIT* (m)</td>
<td>£1,258</td>
<td>£1,514</td>
<td>£1,704</td>
</tr>
<tr>
<td>ROE</td>
<td>8.0%</td>
<td>8.2%</td>
<td>8.9%</td>
</tr>
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<table>
<thead>
<tr>
<th></th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capex (m)</td>
<td>£2,582</td>
<td>£2,600</td>
<td>£3,152</td>
</tr>
</tbody>
</table>

*Underlying EBIT excludes the impact of timing and FX
Overview by jurisdiction – FY18

$20.7bn
US RATE BASE
As at March 2018

$2.8bn
FERC
New York

$1.5bn
Rhode Island

$2.4bn
Massachusetts

$20.7bn of assets outside of rate base, including capital work in progress

$11.5bn

$3.3bn
CAPITAL INVESTMENT
For year ended March 2018

$0.3bn
FERC
New York

$0.3bn
Rhode Island

$1.0bn
Massachusetts

$3.3bn

8.9%
ACHIEVED ROE
For year ended March 2018

New York 9.0%
Massachusetts 7.8%
Rhode Island 6.9%

FERC 11.5%

US Overall
(95% of RoE achieved)
8.9%

2017/18 RoE/Rate base ($m)
FERC
11.5%
KEDLI 10.1%
KEDNY 9.0%
Mass Elec 9.0%
Narragansett Gas 8.4%
NiMo Gas 7.9%
Narragansett Electric 5.6%
Mass Gas 6.6%

$20.7bn

$1.7bn

$1.5bn

$0.3bn
Industry trends driving investment

- Aging infrastructure
  - storm hardening/resilience
- Environmental policy – National Grid jurisdictions have aggressive CO₂ reduction targets
- Falling costs of renewables
- Changing customer needs
  - 7m accounts representing 20m people
  - digitization has driven increased customer interaction
  - customers are looking for better charging infrastructure and believe utilities should lead

ELECTRIC INVESTMENT DRIVERS

- ~25% Future proofing
- ~15% Customer driven
- ~60% Asset Condition

$1.3bn FY18 ELECTRIC CAPEX

EV COSTS EXPECTED TO DECLINE

Average price per car

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost (k)</th>
<th>Reduction (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$44k</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>$41k</td>
<td>41%</td>
</tr>
<tr>
<td>2020</td>
<td>$28k</td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>$26k</td>
<td></td>
</tr>
</tbody>
</table>

Source: Bloomberg New Energy Finance
Our strategic priorities

• Deliver world-class network reliability and safety performance
• Achieve returns as close as possible to the allowed
  – delivered 95% in FY18
• Disciplined investment in core networks
  – timely recovery of capex
• Propose new solutions for customers aligned to industry evolution
Massachusetts Electric – Business Overview

Massachusetts Electric distribution companies

- 1.3 million electric customers
- 5,000 employees in Massachusetts
- Over 13,000 miles of electric lines
- Regulated by Massachusetts Department of Public Utilities

Investment since 2016

- Improvements to underground facilities and upgrade substations
- Improved electric reliability and faster restoration during major storms/emergency events
- Increased interconnections of Distributed Generation
- Regulatory approval for a grid modernization proposal
New Massachusetts Electric rate filing
Evolving the regulatory deal

- National Grid re-filed for Massachusetts Electric in November 2018
- Commission order expected September 2019, with new rates effective October 2019
- Key requests under this filing:

**Requested financials**
- Requested RoE 10.5%
- Debt:Equity 47%/53%
- Additional revenue of $70m:
  - $20m rate base return
  - $50m increased operating expense

**Requested capex**
- Supports $300m capex p.a.
- 5 year, $167m investment in EV charging infrastructure
  - increasing charging ports by over 17,000 in Massachusetts
- $50m in utility scale energy storage, ownership of 14MW

**Requested new mechanisms**
- Performance Based Rate Mechanism (PBRM)
- I-x approach (I = inflation, x = productivity factor)
- Would fund both capex and opex
- Ensures inflation factored into cost base

Five-year rate plan requested (Oct 2019 to Oct 2024)
# Today’s visit
Leading the development of tomorrow’s networks

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.15</td>
<td>Tour of electric transmission control cyber security operations centers</td>
</tr>
<tr>
<td>13.45</td>
<td>Solar &amp; Storage Program – Tour of the NBRO canopy</td>
</tr>
<tr>
<td>14.40</td>
<td>DOE Project for interconnecting a vanadium flow battery, private wind turbine and smart grid investments</td>
</tr>
<tr>
<td>15.20</td>
<td>Detailed end-to-end view of National Grid’s smart grid approach, grid modernization strategy &amp; the electrification of transportation</td>
</tr>
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**Evolve for the future**

**Northboro Operations**
Transmission Control, Security Operations Center and Solar & Storage Program

**Vionx Battery Storage & Wind Turbine** - Worcester

**Smart Grid & Grid Modernisation / Electrification of Transportation** - Millbury