DISCUSSION ITEMS

• Reliability Tracking and Results
• Observations and Trends
• Reliability Action Plans
## HISTORIC SAIDI, SAIFI & CAIDI RESULTS

<table>
<thead>
<tr>
<th>SPS</th>
<th>IEEE 1366 Without MEDs - (State)</th>
<th>All Days-Includes IEEE 1366 MEDs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SAIDI</td>
<td>SAIFI</td>
</tr>
<tr>
<td>State of New Mexico</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>106.4</td>
<td>0.91</td>
</tr>
<tr>
<td>2021</td>
<td>128.5</td>
<td>1.14</td>
</tr>
<tr>
<td>2020</td>
<td>103.7</td>
<td>0.88</td>
</tr>
<tr>
<td>2019</td>
<td>136.6</td>
<td>1.2</td>
</tr>
<tr>
<td>2018</td>
<td>1060.2</td>
<td>1.03</td>
</tr>
<tr>
<td>2017</td>
<td>90.3</td>
<td>0.94</td>
</tr>
<tr>
<td>2016</td>
<td>118.3</td>
<td>1.17</td>
</tr>
<tr>
<td>2015</td>
<td>132.9</td>
<td>1.26</td>
</tr>
<tr>
<td>2014</td>
<td>74.6</td>
<td>0.8</td>
</tr>
<tr>
<td>2013</td>
<td>93.9</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Assumptions: IEEE 1366 Without MED’s - (State): IEEE 1366 normalization method applied to the Xcel Energy territory in the State of New Mexico (includes only customers in NM).

All indices’ results are based on just the Xcel Energy customers & outages in the state of New Mexico.

SAIDI & CAIDI are reported in minutes. SAIFI is reported in number of interruptions.

SAIDI - System Average Interruption Duration Index - Indicates the total duration of time out of service a customer experiences on average over the timeframe measured.

SAIFI - System Average Interruption Frequency Index - Indicates how often (# of) on average a customer experiences a sustained outage over the timeframe measured.

CAIDI – Customer Average Interruption Duration Index – Indicates the average time to restore service of an outage.
# Outage Durations

## Single Outage

<table>
<thead>
<tr>
<th>State of New Mexico</th>
<th>SPS-CELI All Days-Includes IEEE 1366 MEDs</th>
<th>IEEE 1366 Without MEDs - (State)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;4 Hours</td>
<td>&gt;8 Hours</td>
</tr>
<tr>
<td>5 Yr Avg (18-22)</td>
<td>10,872</td>
<td>2,990</td>
</tr>
<tr>
<td>10YR Avg (13-22)</td>
<td>9,070</td>
<td>2,207</td>
</tr>
<tr>
<td>2022</td>
<td>10,406</td>
<td>4,538</td>
</tr>
<tr>
<td>2021</td>
<td>16,140</td>
<td>2,944</td>
</tr>
<tr>
<td>2020</td>
<td>8,856</td>
<td>2,769</td>
</tr>
<tr>
<td>2019</td>
<td>10,634</td>
<td>2,477</td>
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<tr>
<td>2018</td>
<td>8,325</td>
<td>2,221</td>
</tr>
<tr>
<td>2017</td>
<td>5,687</td>
<td>1,553</td>
</tr>
<tr>
<td>2016</td>
<td>8,655</td>
<td>1,949</td>
</tr>
<tr>
<td>2015</td>
<td>11,467</td>
<td>1,745</td>
</tr>
<tr>
<td>2014</td>
<td>1,965</td>
<td>1,237</td>
</tr>
<tr>
<td>2013</td>
<td>5,566</td>
<td>641</td>
</tr>
</tbody>
</table>

Customers with multiple qualifying duration outages can be counted more than once in one or more buckets.
## HISTORICAL MED’S

<table>
<thead>
<tr>
<th>MED Date</th>
<th>Main Driver</th>
<th>Customer Interruptions</th>
<th>Customer Minutes</th>
<th>CAID([Mins])</th>
<th>90% of Cust Restored</th>
<th>All Restored</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/16/23</td>
<td>Heavy Wind</td>
<td>26,009</td>
<td>6,982,485</td>
<td>234</td>
<td>2/27/23 7:41 PM</td>
<td>2/27/23 10:30 PM</td>
</tr>
<tr>
<td>08/21/21</td>
<td>Wind/Lightning/Storm</td>
<td>2,612</td>
<td>881,679</td>
<td>330</td>
<td>8/22/21 1:16 AM</td>
<td>8/22/21 6:45 PM</td>
</tr>
<tr>
<td>02/10/21</td>
<td>Cold/Snow/Ice/Load Relief</td>
<td>75,519</td>
<td>6,845,015</td>
<td>91</td>
<td>2/16/21 10:16 AM</td>
<td>2/17/21 1:01 AM</td>
</tr>
<tr>
<td>07/09/20</td>
<td>Heat/Overloading</td>
<td>10,387</td>
<td>909,857</td>
<td>88</td>
<td>7/9/20 5:03 AM</td>
<td>7/9/20 9:40 PM</td>
</tr>
<tr>
<td>09/14/19</td>
<td>Wind/Lightning/Storm</td>
<td>4,834</td>
<td>1,105,620</td>
<td>229</td>
<td>3/14/19 8:20 PM</td>
<td>3/15/19 4:10 PM</td>
</tr>
<tr>
<td>03/13/19</td>
<td>Wind/Tornado/Lightning/Storm</td>
<td>26,673</td>
<td>12,962,187</td>
<td>486</td>
<td>3/14/19 11:38 AM</td>
<td>3/15/19 5:05 PM</td>
</tr>
<tr>
<td>03/12/19</td>
<td>Wind/Tornado/Lightning/Storm</td>
<td>5,415</td>
<td>1,520,802</td>
<td>281</td>
<td>3/13/19 12:46 AM</td>
<td>3/15/19 3:54 PM</td>
</tr>
<tr>
<td>12/27/15</td>
<td>Snow/Cold/Ice/Wind</td>
<td>7,524</td>
<td>2,782,651</td>
<td>370</td>
<td>12/27/15 9:30 PM</td>
<td>12/30/15 11:30 AM</td>
</tr>
<tr>
<td>12/26/15</td>
<td>Snow/Cold/Ice/Wind</td>
<td>7,131</td>
<td>3,654,631</td>
<td>512</td>
<td>12/27/15 5:47 PM</td>
<td>12/29/15 10:49 AM</td>
</tr>
<tr>
<td>08/16/15</td>
<td>Wind/Lightning/Storm</td>
<td>6,664</td>
<td>803,861</td>
<td>121</td>
<td>8/16/15 10:17 AM</td>
<td>8/16/15 9:00 PM</td>
</tr>
<tr>
<td>11/24/14</td>
<td>Wind/Lightning/Storm</td>
<td>3,519</td>
<td>757,104</td>
<td>215</td>
<td>11/4/14 4:09 AM</td>
<td>11/4/14 7:00 PM</td>
</tr>
<tr>
<td>12/07/13</td>
<td>Cold/Overloading</td>
<td>5,298</td>
<td>835,857</td>
<td>162</td>
<td>12/7/13 9:14 PM</td>
<td>12/8/13 12:50 PM</td>
</tr>
<tr>
<td>11/12/13</td>
<td>Cold/Wind/Transmission</td>
<td>20,261</td>
<td>905,404</td>
<td>45</td>
<td>11/12/13 11:05 AM</td>
<td>11/12/13 10:12 PM</td>
</tr>
<tr>
<td>06/17/13</td>
<td>Wind/Lightning/Storm</td>
<td>14,804</td>
<td>1,503,354</td>
<td>102</td>
<td>6/17/13 3:01 PM</td>
<td>6/18/13 3:45 AM</td>
</tr>
<tr>
<td>06/09/13</td>
<td>Public Damage/Transmission</td>
<td>3,811</td>
<td>1,000,387</td>
<td>262</td>
<td>6/9/13 2:07 PM</td>
<td>6/10/13 10:40 AM</td>
</tr>
<tr>
<td>02/21/13</td>
<td>Wind/Snow/Transmission</td>
<td>3,526</td>
<td>909,252</td>
<td>232</td>
<td>2/21/13 4:57 AM</td>
<td>2/21/13 9:45 AM</td>
</tr>
</tbody>
</table>
# 10 Worst Performing Circuits/Feeders

Table 4. Ten Worst Performing Feeders/Circuits

(IEEE State Normalized-Distribution Lines Only (Feeder and Below))

<table>
<thead>
<tr>
<th>Feeder</th>
<th>Location Type</th>
<th>Customers at Year End</th>
<th>2023 YTD Apr</th>
<th>2022 YTD Apr</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEAH1750</td>
<td>Rural Lea County</td>
<td>70,042</td>
<td>30</td>
<td>29,014</td>
</tr>
<tr>
<td>DUNI1020</td>
<td>Rural Lea County</td>
<td>97,048</td>
<td>111</td>
<td>109,020</td>
</tr>
<tr>
<td>CO-00020</td>
<td>Rural Lea County</td>
<td>138,020</td>
<td>104</td>
<td>130,020</td>
</tr>
<tr>
<td>LEAH1730</td>
<td>Rural Lea County</td>
<td>161,020</td>
<td>28</td>
<td>164,020</td>
</tr>
<tr>
<td>LEAH1700</td>
<td>Rural Lea County</td>
<td>847,020</td>
<td>117</td>
<td>848,020</td>
</tr>
<tr>
<td>LEAO1031</td>
<td>Rural Lea County</td>
<td>116,020</td>
<td>132</td>
<td>150,020</td>
</tr>
<tr>
<td>LEAO1032</td>
<td>Rural Lea County</td>
<td>51,020</td>
<td>126</td>
<td>50,020</td>
</tr>
<tr>
<td>SAE4250</td>
<td>Rural Lea County</td>
<td>110,020</td>
<td>34</td>
<td>128,020</td>
</tr>
<tr>
<td>LEAO1050</td>
<td>Rural Lea County</td>
<td>26,020</td>
<td>20</td>
<td>34,020</td>
</tr>
<tr>
<td>CO-00200</td>
<td>Rural Lea County</td>
<td>56,020</td>
<td>212</td>
<td>47,020</td>
</tr>
</tbody>
</table>

2023 YTD Apr | Customers at Year End | Location Type | Location Type |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>103</td>
</tr>
</tbody>
</table>

2022 YTD Apr | Customers at Year End | Location Type | Location Type |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>
Reliability Programs

• Patrol work orders generated for all breaker level momentary outages.
  – Tracked to ensure responses.

• Feeder Performance Improvement Program (FPIP)

• Reliability Exception Monitoring (REMS)

• Customers Experiencing Multiple Interruptions (CEMI)

• Proactive Line Patrols / Asset Health
  – Two year rotation for feeders
  – All taps on a 2-4 year rotation
  – Individual work order and prioritization for all deficiencies (arresters, crossarms, guys, etc)
  – Completion of corrective action is KPI for SPS Distribution
  – Allow service personnel to suggest upgrades (additional fusing, etc)

• Pole Inspect, Treat, Replace Program

• Pilot tests of new equipment
  – Single phase electronic reclosers
  – Cellular SCADA to field equipment
Asset Health

• From 2020 through 2022, SPS has:
  • Completed approximately 130 circuit patrols in New Mexico
  • Identified approximately 1950 corrective actions to be addressed
  • Completed approximately 2178 corrective actions (including carryover from 2019)
POLE INSPECT, TREAT, REPLACE

• SPS will continue to assess and treat approximately 40,000 poles per year with the intention of remaining on a 12-yr cycle.

• 2020
  – Replaced 4,331 poles
  – 648 poles replaced in NM

• 2021
  – Replaced 4,002 poles total
  – 514 poles replaced in NM

• 2022
  – Replaced approximately 1794 poles
  – 487 poles replaced in NM
• A multi-year effort to design and plan for an Advanced Distribution Management System (ADMS) that will provide an integrated operation and decision support system to assist control room, field personnel, and engineering with the monitoring, control and optimization of the electric distribution system.

• When implemented, it will manage the complex interaction of outage events, feeder switching operations and advanced applications such as Fault Location Isolation and Service Restoration (FLISR).
## Distribution O&M Expenditures, Capital Investments

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US Inflation rates (avg annualized)</td>
<td>1.50%</td>
<td>1.60%</td>
<td>0.10%</td>
<td>1.30%</td>
<td>2.10%</td>
<td>2.40%</td>
<td>1.80%</td>
<td>1.20%</td>
<td>4.70%</td>
<td>8.00%</td>
</tr>
<tr>
<td>NM Distribution O&amp;M (actual values)</td>
<td>$ 9,411,602</td>
<td>$ 11,644,461</td>
<td>$ 12,752,723</td>
<td>$ 10,077,165</td>
<td>$ 11,632,336</td>
<td>$ 12,538,060</td>
<td>$ 13,322,533</td>
<td>$ 11,859,654</td>
<td>$ 10,197,796</td>
<td>$ 10,859,263</td>
</tr>
<tr>
<td>NM Distribution Capital (actual values)</td>
<td>$ 29,753,213</td>
<td>$ 64,039,442</td>
<td>$ 87,425,586</td>
<td>$ 73,984,477</td>
<td>$ 71,919,181</td>
<td>$ 6,949,137</td>
<td>$ 20,321,825</td>
<td>$ 14,113,290</td>
<td>$ 15,642,643</td>
<td>$ 21,350,165</td>
</tr>
<tr>
<td>NM Distribution Capital Asset Health and Reliability (actual)</td>
<td>$ 11,986,469</td>
<td>$ 14,611,037</td>
<td>$ 15,737,299</td>
<td>$ 12,432,894</td>
<td>$ 14,167,439</td>
<td>$ 14,956,467</td>
<td>$ 15,519,779</td>
<td>$ 13,571,347</td>
<td>$ 11,531,260</td>
<td>$ 11,728,004</td>
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<tr>
<td>NM Distribution O&amp;M (inflation adjusted)</td>
<td>$ 35,492,170</td>
<td>$ 74,601,278</td>
<td>$ 100,043,644</td>
<td>$ 83,658,687</td>
<td>$ 77,672,715</td>
<td>$ 8,289,523</td>
<td>$ 23,673,444</td>
<td>$ 16,152,517</td>
<td>$ 17,688,075</td>
<td>$ 23,058,178</td>
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<tr>
<td>NM Distribution Capital Asset Health and Reliability (inflation adjusted)</td>
<td>$ 4802831</td>
<td>$ 4987260</td>
<td>$ 5074881</td>
<td>$ 5252796</td>
<td>$ 5441880</td>
<td>$ 6152841</td>
<td>$ 6940402</td>
<td>$ 7281787</td>
<td>$ 7754184</td>
<td>$ 8894635</td>
</tr>
<tr>
<td>NM Line-miles (miles)</td>
<td>3518</td>
<td>4029</td>
<td>4179</td>
<td>4290</td>
<td>4368</td>
<td>4419</td>
<td>4527</td>
<td>4698</td>
<td>4891</td>
<td>5066</td>
</tr>
<tr>
<td>NM Retail-customer (count)</td>
<td>28318</td>
<td>103537</td>
<td>109541</td>
<td>107493</td>
<td>108526</td>
<td>110483</td>
<td>111066</td>
<td>114003</td>
<td>115613</td>
<td>117960</td>
</tr>
<tr>
<td>Inflation adjusted O&amp;M per MWh</td>
<td>$ 2.50</td>
<td>$ 2.53</td>
<td>$ 3.10</td>
<td>$ 2.37</td>
<td>$ 2.60</td>
<td>$ 2.43</td>
<td>$ 2.24</td>
<td>$ 1.94</td>
<td>$ 1.67</td>
<td>$ 1.49</td>
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<tr>
<td>Inflation adjusted O&amp;M per line-mile</td>
<td>$ 3,059.33</td>
<td>$ 3,627.37</td>
<td>$ 3,771.22</td>
<td>$ 2,888.11</td>
<td>$ 3,243.46</td>
<td>$ 3,884.58</td>
<td>$ 3,428.27</td>
<td>$ 2,888.75</td>
<td>$ 2,357.65</td>
<td>$ 2,342.79</td>
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<tr>
<td>Inflation adjusted O&amp;M per retail customer</td>
<td>$ 121.92</td>
<td>$ 141.12</td>
<td>$ 147.16</td>
<td>$ 115.66</td>
<td>$ 130.79</td>
<td>$ 135.37</td>
<td>$ 138.61</td>
<td>$ 119.04</td>
<td>$ 98.88</td>
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<td>Inflation adjusted Capital per MWh</td>
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<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 5.77</td>
<td>$ 10.75</td>
<td>$ 13.81</td>
<td>$ 10.75</td>
<td>$ 8.73</td>
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<td>Inflation adjusted Capital per line-mile</td>
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<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 8,031.72</td>
<td>$ 16,478.19</td>
<td>$ 21,294.94</td>
<td>$ 17,104.62</td>
<td>$ 15,515.92</td>
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<tr>
<td>Inflation adjusted Capital per retail customer</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 321.23</td>
<td>$ 606.29</td>
<td>$ 877.50</td>
<td>$ 717.40</td>
<td>$ 660.15</td>
</tr>
</tbody>
</table>

*No Capital information was readily available for years 2013-2017*