Jacobsen Declaration Exhibit AH

```
<?xml version="1.0" encoding="utf-8"?>
<decoders xmlns:xsd="http://www.w3.org/2001/XMLSchema"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <date created />
  <date_modified>20050616</date modified>
  <decoder template language="English">
    <tpl version>1</tpl version>
    <decoder version>3</decoder version>
    <decoder_high_version>6</decoder_high_version>
    <manufacturer id>113</manufacturer id>
    <mfg>QS Industries (QSI)</mfg>
    <name>BLI GG-1 - QSI Electric</name>
    proq modes direct="YES" paged="YES" register="YES"
ops="YES" />
    <reset present="1" cv="8" val="8" />
    primaryindex>49
    <secondaryindex>50</secondaryindex>
    <speed_curve starting_cv="67" ending_cv="94" />
    <fmapList>
      <fmap cv="33" defval="1" mask="255" fname="Fwd light" />
      <fmap cv="34" defval="2" mask="255" fname="Rev light" />
      <fmap cv="35" defval="4" mask="255" fname="F1" />
      <fmap cv="36" defval="8" mask="255" fname="F2" />
      <fmap cv="37" defval="16" mask="2040" fname="F3" />
      <fmap cv="38" defval="32" mask="2040" fname="F4" />
      <fmap cv="39" defval="64" mask="2040" fname="F5" />
      <fmap cv="40" defval="128" mask="2040" fname="F6" />
      <fmap cv="41" defval="256" mask="2040" fname="F7" />
      <fmap cv="42" defval="512" mask="2040" fname="F8" />
      <fmap cv="43" defval="1024" mask="16320" fname="F9" />
      <fmap cv="44" defval="2048" mask="16320" fname="F10" />
      <fmap cv="45" defval="4096" mask="16320" fname="F11" />
      <fmap cv="46" defval="8192" mask="16320" fname="F12" />
    </fmapList>
    <cvList>
      <cv index="1">
        <default>3</default>
        <min>0</min>
        <max>255</max>
        <name>Primary Address</name>
        <comment>Short address</comment>
        <bits_defined>NO</bits_defined>
        <date modified />
        <br/>ditmask />
        <stringList />
      </cv>
      <cv index="2">
        <default>32</default>
        <min>0</min>
        < max > 255 < / max >
        <name>Vstart</name>
        <comment>A value of 255 corresponds to 100%</comment>
        <bits_defined>NO</bits_defined>
        <date modified />
```

```
<br/><br/>bitmask />
  <stringList />
</cv>
<cv index="3">
  <default>3</default>
  <min>0</min>
  < max > 31 < / max >
  <name>Acceleration Rate</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="4">
  <default>3</default>
  <min>0</min>
  < max > 31 < / max >
  <name>Deceleration Rate</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="5">
  <default>1</default>
  <min>1</min>
  <max>255</max>
  <name>Max Volts</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="7">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>Manufacturer Version No</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="8">
  <default>113</default>
  <min>0</min>
  <max>255</max>
  <name>Manufacturer ID</name>
  <comment />
  <bits_defined>NO</bits_defined>
```

```
<date modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="11">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>Packet Time-out Value
  <comment />
  <bits_defined>NO</bits_defined>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="17">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>Extended Address</name>
  <comment />
  <bits defined>NO</bits defined>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="19">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>Consist Address</name>
  <comment />
  <bits_defined>YES</bits_defined>
  <bit_definition>
    <bit_0 />
    <bit 1 />
    <bit_2 />
    <bit_3 />
    <bit 4 />
    <bit_5 />
    <bit 6 />
    <bit_7>Consist Direction Reversed</bit_7>
  </bit_definition>
  <date_modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="21">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>Consist Address Active For F1
  <comment />
  <bits_defined>YES</bits_defined>
```

```
<br/>bit definition>
          <bit 0 />
          <bit 1>Consist Address Active For F2 Respond to
Consist Address</bit 1>
          <bit 2>Consist Address Active For F3 Respond to
Consist Address</pit_2>
          <bit 3>Consist Address Active For F4 Respond to
Consist Address</bit 3>
          <bit_4>Consist Address Active For F5 Respond to
Consist Address</bit 4>
          <bit 5>Consist Address Active For F6 Respond to
Consist Address</bit 5>
          <bit 6>Consist Address Active For F7 Respond to
Consist Address</bit 6>
          <bit_7>Consist Address Active For F8 Respond to
Consist Address</pit_7>
        </bit definition>
        <date modified />
        <br/><br/>bitmask />
        <stringList />
      </cv>
      <cv index="22">
        <default>3</default>
        <min>0</min>
        <max>255</max>
        <name>Consist Address Active For FL in Forward
        <comment />
        <bits defined>YES</bits defined>
        <br/>definition>
          <bit_0 />
          <bit 1>Consist Address Active For FL in Reverse
Respond to Consist Address</bit 1>
          <bit 2>Consist Address Active For F9 Respond to
Consist Address</bit 2>
          <bit 3>Consist Address Active For F10 Respond to
Consist Address</bit 3>
          <bit_4>Consist Address Active For F11 Respond to
Consist Address</bit 4>
          <bit 5>Consist Address Active For F12 Respond to
Consist Address</bit 5>
          <bit 6 />
          <bit_7 />
        </bit definition>
        <date modified />
        <br/><br/>bitmask />
        <stringList />
      </cv>
      <cv index="23">
        <default>3</default>
        <min>0</min>
        < max > 127 < /max >
        <name>Consist Acceleration Adjustment
        <comment />
        <bits defined>YES</bits defined>
```

```
<br/>bit definition>
          <bit_0 />
          <br/>bit 1 />
          <bit_2 />
          <bit_3 />
          <bit 4 />
          <bit_5 />
          <bit 6 />
          <bit_7>Consist Acceleration Adjustment Sign
Adjustment Subtracted</bit_7>
        </bit definition>
        <date modified />
        <br/><br/>bitmask />
        <stringList />
      </cv>
      <cv index="24">
        <default>3</default>
        <min>0</min>
        <max>127</max>
        <name>Consist Deceleration Adjustment
        <comment />
        <bits_defined>YES</bits_defined>
        <br/>bit definition>
          <bit_0 />
          <br/>tit 1 />
          <bit_2 />
          <bit_3 />
          <bit 4 />
          <bit 5 />
          <bit 6 />
          <bit_7>Consist Deceleration Adjustment Sign
Adjustment Subtracted</bit_7>
        </bit definition>
        <date modified />
        <br/><br/>bitmask />
        <stringList />
      </cv>
      <cv index="25">
        <default>2</default>
        <min>0</min>
        <max>255</max>
        <name>Quantum Speed Table</name>
        <comment>value is applied</comment>
        <bits_defined>NO</bits_defined>
        <date modified />
        <bitmask>11111111
        <stringList>
          <enumVal choice="User Defined Speed Table" value="1"</pre>
/>
          <enumVal choice="Linear Curve" value="2" />
          <enumVal choice="Fast start 1 (close to linear)"</pre>
value="3" />
          <enumVal choice="Fast start 2" value="4" />
          <enumVal choice="Fast start 3" value="5" />
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<enumVal choice="Fast start 4" value="6" />
          <enumVal choice="Fast start 5 (greatest curvature)"</pre>
value="7" />
          <enumVal choice="Slow start 1 (close to linear)"</pre>
value="67" />
          <enumVal choice="Slow start 2" value="68" />
          <enumVal choice="Slow start 3" value="69" />
          <enumVal choice="Slow start 4" value="70" />
          <enumVal choice="Slow start 5 (greatest curavture"</pre>
value="71" />
        </stringList>
      </cv>
      <cv index="29">
        <default>3</default>
        <min>0</min>
        < max > 255 < / max >
        <name>Locomotive Direction</name>
        <comment />
        <bits defined>YES</bits defined>
        <br/>definition>
          <bit 0 />
          <bit 1>FL Location 28/128 speed step format</bit 1>
          <bit 2>Power Source Conversion DC conversion
enabled</bit 2>
          <bit 3 />
          <bit_4>Speed Table Definition Use QSI table or User
table in CVs 67 through 94</bit_4>
          <bit 5>Address Format Two byte (extended) address/
bit 5>
          <bit 6 />
          <bit_7 />
        </bit definition>
        <date modified />
        <br/><br/>bitmask />
        <stringList />
      <cv index="33">
        <default>1</default>
        <min>0</min>
        <max>255</max>
        <name>FL(f) controls output 1</name>
        <comment />
        <bits defined>YES</bits defined>
        <br/>definition>
          <bit 0 />
          <bit_1>FL(f) controls output 2 Yes</bit_1>
          <bit 2>FL(f) controls output 3 Yes</bit 2>
          <bit_3>FL(f) controls output 4 Yes</bit_3>
          <bit_4>FL(f) controls output 5 Yes</bit_4>
          <bit 5>FL(f) controls output 6 Yes</bit 5>
          <bit 6>FL(f) controls output 7 Yes</bit 6>
          <bit 7>FL(f) controls output 8 Yes</bit 7>
        </bit_definition>
        <date modified />
```

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<br/><br/>bitmask />
  <stringList />
</cv>
<cv index="34">
  <default>1</default>
  <min>0</min>
  < max > 255 < / max >
  <name>FL(r) controls output 1</name>
  <comment />
  <bits_defined>YES</bits_defined>
  <br/>definition>
    <bit 0 />
    <bit_1>FL(r) controls output 2 Yes</bit_1>
    <bit 2>FL(r) controls output 3 Yes</bit 2>
    <bit_3>FL(r) controls output 4 Yes</bit_3>
    <bit_4>FL(r) controls output 5 Yes</bit_4>
    <bit 5>FL(r) controls output 6 Yes</bit 5>
    <bit 6>FL(r) controls output 7 Yes</bit 6>
    <bit 7>FL(r) controls output 8 Yes</bit 7>
  </bit definition>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="35">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>F1 controls output 1</name>
  <comment />
  <bits_defined>YES</bits_defined>
  <br/>definition>
    <bit 0 />
    <br/><bit 1>F1 controls output 2 Yes</bit 1>
    <bit 2>F1 controls output 3 Yes</bit 2>
    <bit 3>F1 controls output 4 Yes</bit 3>
    <bit_4>F1 controls output 5 Yes</bit_4>
    <bit_5>F1 controls output 6 Yes</bit_5>
    <bit 6>F1 controls output 7 Yes</bit 6>
    <bit 7>F1 controls output 8 Yes</bit 7>
  </bit definition>
  <date_modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="36">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>F2 controls output 1</name>
  <comment />
  <bits_defined>YES</bits_defined>
  <br/>definition>
    <bit 0 />
```

```
<bit_1>F2 controls output 2 Yes</bit 1>
    <bit 2>F2 controls output 3 Yes</bit 2>
    <bit 3>F2 controls output 4 Yes</bit 3>
    <bit_4>F2 controls output 5 Yes</bit_4>
    <bit_5>F2 controls output 6 Yes</bit_5>
    <bit 6>F2 controls output 7 Yes</bit 6>
    <bit 7>F2 controls output 8 Yes</bit 7>
  </bit definition>
  <date_modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="37">
  <default>3</default>
  <min>0</min>
  < max > 255 < / max >
  <name>F3 controls output 1</name>
  <comment />
  <bits defined>YES</bits defined>
  <br/>definition>
    <bit 0 />
    <bit 1>F3 controls output 2 Yes</bit 1>
    <bit 2>F3 controls output 3 Yes</bit 2>
    <bit_3>F3 controls output 4 Yes</bit_3>
    <bit 4>F3 controls output 5 Yes</bit 4>
    <bit_5>F3 controls output 6 Yes</bit_5>
    <bit_6>F3 controls output 7 Yes</bit_6>
    <bit 7>F3 controls output 8 Yes</bit 7>
  </bit definition>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="38">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>F4 controls output 4</name>
  <comment />
  <bits_defined>YES</bits_defined>
  <br/>bit definition>
    <bit_0 />
    <bit 1>F4 controls output 5 Yes</bit 1>
    <bit 2>F4 controls output 6 Yes</bit 2>
    <bit 3>F4 controls output 7 Yes</bit 3>
    <bit 4>F4 controls output 8 Yes</bit 4>
    <bit 5>F4 controls output 9 Yes</bit 5>
    <bit_6>F4 controls output 10 Yes</bit_6>
    <bit_7>F4 controls output 11 Yes</bit_7>
  </bit definition>
  <date_modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
```

```
<cv index="39">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>F5 controls output 4</name>
  <comment />
  <bits defined>YES</bits defined>
  <br/>bit definition>
    <bit_0 />
    <bit 1>F5 controls output 5 Yes</bit_1>
    <bit 2>F5 controls output 6 Yes</bit 2>
    <bit 3>F5 controls output 7 Yes</bit 3>
    <bit_4>F5 controls output 8 Yes</bit_4>
    <bit 5>F5 controls output 9 Yes</bit 5>
    <bit_6>F5 controls output 10 Yes</bit_6>
    <bit_7>F5 controls output 11 Yes</bit_7>
  </bit definition>
  <date_modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="40">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>F6 controls output 4</name>
  <comment />
  <bits defined>YES</bits defined>
  <br/>definition>
    <bit_0 />
    <bit_1>F6 controls output 5 Yes</bit_1>
    <bit 2>F6 controls output 6 Yes</bit 2>
    <bit 3>F6 controls output 7 Yes</bit 3>
    <bit 4>F6 controls output 8 Yes</bit 4>
    <bit_5>F6 controls output 9 Yes</bit_5>
    <bit 6>F6 controls output 10 Yes</bit 6>
    <bit_7>F6 controls output 11 Yes</bit_7>
  </bit_definition>
  <date modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="41">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>F7 controls output 4</name>
  <comment />
  <bits_defined>YES</bits_defined>
  <br/>definition>
    <bit 0 />
    <bit 1>F7 controls output 5 Yes</bit 1>
    <bit_2>F7 controls output 6 Yes</bit_2>
    <bit 3>F7 controls output 7 Yes</bit 3>
```

```
<br/><bit 4>F7 controls output 8 Yes</bit 4>
    <bit_5>F7 controls output 9 Yes</bit_5>
    <bit 6>F7 controls output 10 Yes</bit 6>
    <bit_7>F7 controls output 11 Yes</bit_7>
  </bit_definition>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="42">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>F8 controls output 4</name>
  <comment />
  <bits_defined>YES</bits_defined>
  <br/>definition>
    <bit 0 />
    <br/><bit 1>F8 controls output 5 Yes</bit 1>
    <bit_2>F8 controls output 6 Yes</bit_2>
    <bit_3>F8 controls output 7 Yes</bit 3>
    <bit 4>F8 controls output 8 Yes</bit 4>
    <bit 5>F8 controls output 9 Yes</bit 5>
    <bit_6>F8 controls output 10 Yes</bit_6>
    <bit 7>F8 controls output 11 Yes</bit 7>
  </bit_definition>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="43">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>F9 controls output 7</name>
  <comment />
  <bits_defined>YES</bits_defined>
  <br/>definition>
    <bit 0 />
    <bit_1>F9 controls output 8 Yes</bit_1>
    <bit 2>F9 controls output 9 Yes</bit 2>
    <bit_3>F9 controls output 10 Yes</bit_3>
    <bit_4>F9 controls output 11 Yes</bit_4>
    <bit 5>F9 controls output 12 Yes</bit 5>
    <br/><bit 6>F9 controls output 13 Yes</bit 6>
    <bit 7>F9 controls output 14 Yes</bit 7>
  </bit definition>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="44">
  <default>3</default>
  <min>0</min>
```

```
<bit 7>F12 controls output 14 Yes</bit_7>
  </bit_definition>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="62">
  <default>1</default>
  <min>0</min>
  <max>255</max>
  <name>Programming Verbal Acknowledgement
  <comment>CV62</comment>
  <bits defined>YES</bits defined>
  <br/>bit definition>
    <bit_0 />
    <bit_1 />
    <bit 2 />
    <bit 3 />
    <bit 4 />
    <bit_5 />
    <bit 6 />
    <bit 7 />
  </bit definition>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="64">
  <default>3</default>
  <min>0</min>
  <max>255</max>
  <name>Verbal CV Inquiry</name>
  <comment>CV64</comment>
  <bits defined>NO</bits defined>
  <date_modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="66">
  <default>128</default>
  <min>0</min>
  <max>255</max>
  <name>Forward Trim</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="67">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 1</name>
```

```
<comment />
  <bits_defined>NO</bits_defined>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="68">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 2</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="69">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 3</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="70">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 4</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="71">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 5</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="72">
  <default>0</default>
  <min>0</min>
  <max>255</max>
```

```
<name>Speed step 6</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="73">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 7</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="74">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 8</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="75">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 9</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="76">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 10</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/>ditmask />
  <stringList />
</cv>
<cv index="77">
  <default>0</default>
  <min>0</min>
```

```
<max>255</max>
  <name>Speed step 11</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="78">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 12</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="79">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 13</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="80">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 14</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="81">
  <default>0</default>
  <min>0</min>
  <max>255</max>
  <name>Speed step 15</name>
  <comment />
  <bits_defined>NO</bits_defined>
  <date_modified />
  <br/><br/>bitmask />
  <stringList />
</cv>
<cv index="82">
  <default>0</default>
```

```
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SI="-1" default="0" comment="QSI">
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CV="51" PI="2" SI="-1" default="1" comment="QSI">
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default="11" comment="OSI">
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default="11" comment="OSI">
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      <icv label="Motor" CVname="52.10" CV="52" PI="10"</pre>
SI="-1" default="11" comment="QSI">
        <indexedVal max="15" />
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      <icv label="Air Pump" CVname="52.16" CV="52" PI="16"</pre>
SI="-1" default="11" comment="QSI">
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SI="-1" default="8" comment="QSI">
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PI="21" SI="-1" default="11" comment="QSI">
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PI="22" SI="-1" default="11" comment="OSI">
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PI="24" SI="-1" default="11" comment="QSI">
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      <icv label="Coupler Sounds" CVname="52.34" CV="52"</pre>
PI="34" SI="-1" default="11" comment="OSI">
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<icv label="Air Brakes" CVname="52.37" CV="52" PI="37"</pre>
SI="-1" default="11" comment="QSI">
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CVname="53.1.0" CV="53" PI="1" SI="0" default="96"
comment="QSI" infoOnly="yes">
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value="96" />
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      </icv>
      <icv label=" - Neutral Only" CVname="53.1.1" CV="53"</pre>
PI="1" SI="1" default="96" comment="QSI" infoOnly="yes">
        <ienumVal>
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value="96" />
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      </icv>
      <icv label="Output 2 - Forward/Reverse Only"</pre>
CVname="53.2.0" CV="53" PI="2" SI="0" default="97"
comment="QSI" infoOnly="yes">
        <ienumVal>
          <ienumChoice choice="Directional Reverse Light"</pre>
value="97" />
        </ienumVal>
      </icv>
      <icv label=" - Neutral Only" CVname="53.2.1" CV="53"</pre>
PI="2" SI="1" default="97" comment="QSI" infoOnly="yes">
        <ienumVal>
          <ienumChoice choice="Directional Reverse Light"</pre>
value="97" />
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      </icv>
      <icv label="Output 3 - Forward/Reverse Only"</pre>
CVname="53.3.0" CV="53" PI="3" SI="0" default="3"
comment="QSI" infoOnly="yes">
        <ienumVal>
          <ienumChoice choice="Bell" value="3" />
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      </icv>
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PI="3" SI="1" default="3" comment="QSI" infoOnly="yes">
        <ienumVal>
          <ienumChoice choice="Bell" value="3" />
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      </icv>
      <icv label="Output 4 - Forward/Reverse Only"</pre>
CVname="53.4.0" CV="53" PI="4" SI="0" default="1"
comment="QSI" infoOnly="yes">
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          <ienumChoice choice="</pre>
                                   place holder not used
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" value="2" />
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      <icv label=" - Neutral Only" CVname="53.4.1" CV="53"</pre>
PI="4" SI="1" default="1" comment="QSI" infoOnly="yes">
        <ienumVal>
          <ienumChoice choice="Whistle/Horn" value="1" />
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      </icv>
      <icv label="Outout 5 - Forward/Reverse Only"</pre>
CVname="53.5.0" CV="53" PI="5" SI="0" default="211"
comment="OSI">
        <ienumVal>
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          <ienumChoice choice="Long Air Let-off" value="9" />
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>
          <ienumChoice choice="Mute" value="64" />
          <ienumChoice choice="Doppler Shift" value="65" />
          <ienumChoice choice="Headlight" value="98" />
          <ienumChoice choice="Dim Headlight" value="99" />
          <ienumChoice choice="Reverse Light" value="100" />
          <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
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value="102" />
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/>
          <ienumChoice choice="Number Board Lights"</pre>
value="105" />
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Directional Mars Light" value="107" />
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Directional Ditch Lights" value="108" />
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value="109" />
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          <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
          <ienumChoice choice="Cruise Control" value="177" />
          <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
          <ienumChoice choice="Coupler Effect" value="211" />
          <ienumChoice choice="Squealing Brakes" value="215" /</pre>
>
          <ienumChoice choice="Squealing Brakes + Air Brakes"</pre>
value="216" />
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      </icv>
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PI="5" SI="1" default="211" comment="QSI">
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          <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
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value="102" />
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/>
          <ienumChoice choice="Number Board Lights"</pre>
value="105" />
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Directional Mars Light" value="107" />
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Directional Ditch Lights" value="108" />
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CVname="53.6.0" CV="53" PI="6" SI="0" default="8"
comment="OSI">
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          <ienumChoice choice="Mute" value="64" />
          <ienumChoice choice="Doppler Shift" value="65" />
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          <ienumChoice choice="Dim Headlight" value="99" />
          <ienumChoice choice="Reverse Light" value="100" />
          <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
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value="102" />
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          <ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
          <ienumChoice choice="Number Board Lights"</pre>
```

```
value="105" />
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Directional Mars Light" value="107" />
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Directional Ditch Lights" value="108" />
          <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
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/>
          <ienumChoice choice="Cruise Control" value="177" />
          <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
          <ienumChoice choice="Coupler Effect" value="211" />
          <ienumChoice choice="Squealing Brakes" value="215" /</pre>
>
          <ienumChoice choice="Squealing Brakes + Air Brakes"</pre>
value="216" />
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      </icv>
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          <ienumChoice choice="Mute" value="64" />
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value="102" />
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/>
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Directional Mars Light" value="107" />
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Directional Ditch Lights" value="108" />
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value="109" />
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comment="OSI">
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          <ienumChoice choice="Mute" value="64" />
          <ienumChoice choice="Doppler Shift" value="65" />
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value="101" />
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value="102" />
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/>
          <ienumChoice choice="Number Board Lights"</pre>
value="105" />
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Directional Mars Light" value="107" />
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Directional Ditch Lights" value="108" />
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value="109" />
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/>
          <ienumChoice choice="Cruise Control" value="177" />
          <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
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          <ienumChoice choice="Squealing Brakes" value="215" /</pre>
          <ienumChoice choice="Squealing Brakes + Air Brakes"</pre>
value="216" />
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PI="7" SI="1" default="5" comment="QSI">
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>
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```
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value="101" />
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/>
          <ienumChoice choice="Number Board Lights"</pre>
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Directional Mars Light" value="107" />
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Directional Ditch Lights value="108" />
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value="109" />
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/>
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CVname="53.8.0" CV="53" PI="8" SI="0" default="65"
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>
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/>
          <ienumChoice choice="Number Board Lights"</pre>
value="105" />
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Directional Mars Light" value="107" />
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Directional Ditch Lights" value="108" />
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```

```
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/>
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Report" value="178" />
          <ienumChoice choice="Coupler Effect" value="211" />
          <ienumChoice choice="Squealing Brakes" value="215" /</pre>
>
          <ienumChoice choice="Squealing Brakes + Air Brakes"</pre>
value="216" />
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PI="8" SI="1" default="144" comment="QSI">
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>
          <ienumChoice choice="Mute" value="64" />
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value="101" />
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value="102" />
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/>
          <ienumChoice choice="Number Board Lights"</pre>
value="105" />
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Directional Mars Light" value="107" />
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Directional Ditch Lights" value="108" />
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/>
          <ienumChoice choice="Start Up" value="144" />
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Report" value="178" />
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CVname="53.9.0" CV="53" PI="9" SI="0" default="216"
comment="QSI">
```

```
<ienumVal>
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value="101" />
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Directional Mars Light" value="107" />
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Directional Ditch Lights value="108" />
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/>
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Report" value="178" />
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          <ienumChoice choice="Squealing Brakes + Air Brakes"</pre>
value="216" />
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PI="9" SI="1" default="9" comment="QSI">
        <ienumVal>
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>
          <ienumChoice choice="Mute" value="64" />
          <ienumChoice choice="Headlight" value="98" />
          <ienumChoice choice="Dim Headlight" value="99" />
          <ienumChoice choice="Reverse Light" value="100" />
          <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
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value="102" />
          <ienumChoice choice="Mars Light" value="103" />
```

```
<ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
           <ienumChoice choice="Number Board Lights"</pre>
value="105" />
           <ienumChoice choice="Directional Headlight +</pre>
Directional Mars Light" value="107" />
           <ienumChoice choice="Directional Headlight +</pre>
Directional Ditch Lights" value="108" />
           <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
           <ienumChoice choice="Ditch Lights" value="110" />
           <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
           <ienumChoice choice="Start Up" value="144" />
           <ienumChoice choice="Shut Down" value="145" />
           <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
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           <ienumChoice choice="Pumps" value="217" />
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comment="QSI">
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>
           <ienumChoice choice="Mute" value="64" />
           <ienumChoice choice="Doppler Shift" value="65" />
           <ienumChoice choice="Headlight" value="98" />
           <ienumChoice choice="Dim Headlight" value="99" />
           <ienumChoice choice="Reverse Light" value="100" />
           <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
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value="102" />
           <ienumChoice choice="Mars Light" value="103" />
           <ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
           <ienumChoice choice="Number Board Lights"</pre>
value="105" />
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Directional Mars Light" value="107" />
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Directional Ditch Lights" value="108" />
           <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
           <ienumChoice choice="Ditch Lights" value="110" />
           <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
           <ienumChoice choice="Cruise Control" value="177" />
           <ienumChoice choice="Scale mph Report and Status</pre>
```

```
Report" value="178" />
          <ienumChoice choice="Coupler Effect" value="211" />
          <ienumChoice choice="Squealing Brakes" value="215" /</pre>
          <ienumChoice choice="Squealing Brakes + Air Brakes"</pre>
value="216" />
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>
          <ienumChoice choice="Mute" value="64" />
          <ienumChoice choice="Headlight" value="98" />
          <ienumChoice choice="Dim Headlight" value="99" />
          <ienumChoice choice="Reverse Light" value="100" />
          <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
          <ienumChoice choice="Directional Mars Light"</pre>
value="102" />
          <ienumChoice choice="Mars Light" value="103" />
          <ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
          <ienumChoice choice="Number Board Lights"</pre>
value="105" />
          <ienumChoice choice="Directional Headlight +</pre>
Directional Mars Light" value="107" />
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Directional Ditch Lights" value="108" />
          <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
          <ienumChoice choice="Ditch Lights" value="110" />
          <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
          <ienumChoice choice="Start Up" value="144" />
          <ienumChoice choice="Shut Down" value="145" />
          <ienumChoice choice="Scale mph Report and Status</pre>
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CVname="53.11.0" CV="53" PI="11" SI="0" default="177"
comment="QSI">
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>
          <ienumChoice choice="Mute" value="64" />
```

```
<ienumChoice choice="Doppler Shift" value="65" />
           <ienumChoice choice="Headlight" value="98" />
           <ienumChoice choice="Dim Headlight" value="99" />
           <ienumChoice choice="Reverse Light" value="100" />
           <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
           <ienumChoice choice="Directional Mars Light"</pre>
value="102" />
           <ienumChoice choice="Mars Light" value="103" />
           <ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
           <ienumChoice choice="Number Board Lights"</pre>
value="105" />
           <ienumChoice choice="Directional Headlight +</pre>
Directional Mars Light" value="107" />
           <ienumChoice choice="Directional Headlight +</pre>
Directional Ditch Lights" value="108" />
           <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
           <ienumChoice choice="Ditch Lights" value="110" />
           <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
           <ienumChoice choice="Cruise Control" value="177" />
           <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
           <ienumChoice choice="Coupler Effect" value="211" />
           <ienumChoice choice="Squealing Brakes" value="215" /</pre>
>
           <ienumChoice choice="Squealing Brakes + Air Brakes"</pre>
value="216" />
        </ienumVal>
      </icv>
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PI="11" SI="1" default="145" comment="QSI">
        <ienumVal>
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>
           <ienumChoice choice="Mute" value="64" />
           <ienumChoice choice="Headlight" value="98" />
           <ienumChoice choice="Dim Headlight" value="99" />
           <ienumChoice choice="Reverse Light" value="100" />
           <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
           <ienumChoice choice="Directional Mars Light"</pre>
value="102" />
           <ienumChoice choice="Mars Light" value="103" />
           <ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
           <ienumChoice choice="Number Board Lights"</pre>
value="105" />
           <ienumChoice choice="Directional Headlight +</pre>
Directional Mars Light" value="107" />
```

```
<ienumChoice choice="Directional Headlight +</pre>
Directional Ditch Lights" value="108" />
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value="109" />
          <ienumChoice choice="Ditch Lights" value="110" />
          <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
          <ienumChoice choice="Start Up" value="144" />
          <ienumChoice choice="Shut Down" value="145" />
          <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
          <ienumChoice choice="Coupler Effect" value="211" />
          <ienumChoice choice="Pumps" value="217" />
        </ienumVal>
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CVname="53.12.0" CV="53" PI="12" SI="0" default="178"
comment="OSI">
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          <ienumChoice choice="Short Air Let-off" value="10" /</pre>
          <ienumChoice choice="Mute" value="64" />
          <ienumChoice choice="Doppler Shift" value="65" />
          <ienumChoice choice="Headlight" value="98" />
          <ienumChoice choice="Dim Headlight" value="99" />
          <ienumChoice choice="Reverse Light" value="100" />
          <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
          <ienumChoice choice="Directional Mars Light"</pre>
value="102" />
          <ienumChoice choice="Mars Light" value="103" />
          <ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
          <ienumChoice choice="Number Board Lights"</pre>
value="105" />
          <ienumChoice choice="Directional Headlight +</pre>
Directional Mars Light" value="107" />
          <ienumChoice choice="Directional Headlight +</pre>
Directional Ditch Lights" value="108" />
          <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
          <ienumChoice choice="Ditch Lights" value="110" />
          <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
          <ienumChoice choice="Cruise Control" value="177" />
          <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
          <ienumChoice choice="Coupler Effect" value="211" />
          <ienumChoice choice="Squealing Brakes" value="215" /</pre>
          <ienumChoice choice="Squealing Brakes + Air Brakes"</pre>
value="216" />
```

```
</ienumVal>
      </icv>
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PI="12" SI="1" default="178" comment="QSI">
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          <ienumChoice choice="Short Air Let-off" value="10" /</pre>
>
          <ienumChoice choice="Mute" value="64" />
          <ienumChoice choice="Headlight" value="98" />
          <ienumChoice choice="Dim Headlight" value="99" />
          <ienumChoice choice="Reverse Light" value="100" />
          <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
          <ienumChoice choice="Directional Mars Light"</pre>
value="102" />
          <ienumChoice choice="Mars Light" value="103" />
          <ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
          <ienumChoice choice="Number Board Lights"</pre>
value="105" />
          <ienumChoice choice="Directional Headlight +</pre>
Directional Mars Light" value="107" />
          <ienumChoice choice="Directional Headlight +</pre>
Directional Ditch Lights" value="108" />
          <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
          <ienumChoice choice="Ditch Lights" value="110" />
          <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
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Report" value="178" />
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CVname="53.13.0" CV="53" PI="13" SI="0" default="105"
comment="QSI">
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          <ienumChoice choice="Mute" value="64" />
          <ienumChoice choice="Doppler Shift" value="65" />
          <ienumChoice choice="Headlight" value="98" />
          <ienumChoice choice="Dim Headlight" value="99" />
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          <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
```

```
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value="102" />
           <ienumChoice choice="Mars Light" value="103" />
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/>
           <ienumChoice choice="Number Board Lights"</pre>
value="105" />
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Directional Mars Light" value="107" />
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Directional Ditch Lights" value="108" />
           <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
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           <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
           <ienumChoice choice="Cruise Control" value="177" />
           <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
           <ienumChoice choice="Coupler Effect" value="211" />
           <ienumChoice choice="Squealing Brakes" value="215" /</pre>
>
           <ienumChoice choice="Squealing Brakes + Air Brakes"</pre>
value="216" />
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PI="13" SI="1" default="105" comment="OSI">
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           <ienumChoice choice="Short Air Let-off" value="10" /</pre>
>
           <ienumChoice choice="Mute" value="64" />
           <ienumChoice choice="Headlight" value="98" />
           <ienumChoice choice="Dim Headlight" value="99" />
           <ienumChoice choice="Reverse Light" value="100" />
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value="101" />
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value="102" />
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           <ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
           <ienumChoice choice="Number Board Lights"</pre>
value="105" />
           <ienumChoice choice="Directional Headlight +</pre>
Directional Mars Light" value="107" />
           <ienumChoice choice="Directional Headlight +</pre>
Directional Ditch Lights" value="108" />
           <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
           <ienumChoice choice="Ditch Lights" value="110" />
           <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
```

```
/>
          <ienumChoice choice="Start Up" value="144" />
          <ienumChoice choice="Shut Down" value="145" />
          <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
          <ienumChoice choice="Coupler Effect" value="211" />
          <ienumChoice choice="Pumps" value="217" />
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CVname="53.14.0" CV="53" PI="14" SI="0" default="101"
comment="OSI">
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           <ienumChoice choice="Short Air Let-off" value="10" /</pre>
>
          <ienumChoice choice="Mute" value="64" />
          <ienumChoice choice="Doppler Shift" value="65" />
          <ienumChoice choice="Headlight" value="98" />
          <ienumChoice choice="Dim Headlight" value="99" />
          <ienumChoice choice="Reverse Light" value="100" />
          <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
          <ienumChoice choice="Directional Mars Light"</pre>
value="102" />
          <ienumChoice choice="Mars Light" value="103" />
          <ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
          <ienumChoice choice="Number Board Lights"</pre>
value="105" />
          <ienumChoice choice="Directional Headlight +</pre>
Directional Mars Light" value="107" />
          <ienumChoice choice="Directional Headlight +</pre>
Directional Ditch Lights" value="108" />
          <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
          <ienumChoice choice="Ditch Lights" value="110" />
          <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
          <ienumChoice choice="Cruise Control" value="177" />
          <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
          <ienumChoice choice="Coupler Effect" value="211" />
          <ienumChoice choice="Squealing Brakes" value="215" /</pre>
>
          <ienumChoice choice="Squealing Brakes + Air Brakes"</pre>
value="216" />
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PI="14" SI="1" default="101" comment="QSI">
        <ienumVal>
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<ienumChoice choice="Long Air Let-off" value="9" />
          <ienumChoice choice="Short Air Let-off" value="10" /</pre>
          <ienumChoice choice="Mute" value="64" />
          <ienumChoice choice="Headlight" value="98" />
          <ienumChoice choice="Dim Headlight" value="99" />
          <ienumChoice choice="Reverse Light" value="100" />
          <ienumChoice choice="Automatic Cab Lights"</pre>
value="101" />
          <ienumChoice choice="Directional Mars Light"</pre>
value="102" />
          <ienumChoice choice="Mars Light" value="103" />
          <ienumChoice choice="Strobe Mars Light" value="104"</pre>
/>
          <ienumChoice choice="Number Board Lights"</pre>
value="105" />
          <ienumChoice choice="Directional Headlight +</pre>
Directional Mars Light" value="107" />
          <ienumChoice choice="Directional Headlight +</pre>
Directional Ditch Lights" value="108" />
          <ienumChoice choice="Directional Ditch Lights"</pre>
value="109" />
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          <ienumChoice choice="Stobe Ditch Lights" value="111"</pre>
/>
          <ienumChoice choice="Start Up" value="144" />
          <ienumChoice choice="Shut Down" value="145" />
          <ienumChoice choice="Scale mph Report and Status</pre>
Report" value="178" />
          <ienumChoice choice="Coupler Effect" value="211" />
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      </icv>
      <icv label="Ditch Light Hold Time (seconds)"</pre>
CVname="55.110.5" CV="55" PI="110" SI="5" default="5"
comment="OSI">
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SI="-1" default="1" comment="QSI">
        <ienumVal>
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value="0" />
          <ienumChoice choice="Speed Control" value="1" />
          <ienumChoice choice="Regulated Throttle Control"</pre>
value="2" />
        </ienumVal>
      <icv label="Speed Step to Scale MPH Scale Factor"</pre>
CVname="56.10" CV="56" PI="10" SI="-1" default="64"
comment="OSI">
        <indexedVal max="128" />
        <ienumVal />
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</icv>
      <icv label="Chuff Interval Scale Factor" CVname="56.12"</pre>
CV="56" PI="12" SI="-1" default="32" comment="OSI">
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CV="56" PI="254" SI="4" default="" comment="QSI"
readOnly="yes">
        <ienumVal />
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      <icv label="Product Model Low Byte" CVname="56.254.5"</pre>
CV="56" PI="254" SI="5" default="" comment="QSI"
readOnly="yes">
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CV="56" PI="254" SI="8" default="" comment="QSI"
readOnly="yes">
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CVname="56.254.10" CV="56" PI="254" SI="10" default=""
comment="QSI" readOnly="yes">
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CV="56" PI="254" SI="11" default="" comment="OSI"
readOnly="yes">
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      <icv label="Firmware Build Date.Year" CVname="56.254.12"</pre>
CV="56" PI="254" SI="12" default="" comment="QSI"
readOnly="yes">
        <ienumVal />
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CV="56" PI="255" SI="-1" default="0" comment="QSI"
opsOnly="yes" writeOnly="yes" infoOnly="yes">
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CV="56" PI="255" SI="-1" default="1" comment="QSI"
opsOnly="yes" writeOnly="yes" infoOnly="yes">
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CV="56" PI="255" SI="-1" default="2" comment="QSI"
opsOnly="yes" writeOnly="yes" infoOnly="yes">
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SI="52" default="113" item="CV56.128.52" />
      <ireset label="Reset Function Output Mappings" CV="56"</pre>
PI="128" SI="53" default="113" item="CV56.128.53" />
      <ireset label="Reset QSI Feature Control" CV="56"</pre>
PI="128" SI="55" default="113" item="CV56.128.55" />
      <ireset label="Reset QSI Configuration" CV="56" PI="128"</pre>
SI="56" default="113" item="CV56.128.56" />
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PI="128" SI="253" default="113" item="CV56.128.253" />
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SI="254" default="113" item="CV56.128.254" />
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