The E-ISAC is providing the Protective Measures Index (PMI), adapted from Argonne National Laboratory’s Physical Security Metric Tool, to asset owners and operators (AOOs) in an effort to measure the ability to resist disruptive events to their facilities.

**Goals**
The high-level objective of the PMI is to enhance the reliability, resilience, and security of the North American electricity industry. The intent of the PMI is to:

1) Provide a tool for AOOs to use in developing their own physical security priorities.
2) Evaluate the security differences between similar facilities.
3) Identify effective facility upgrades to increase the PMI and facility protection.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Open Excel product (Physical Security Metrics Tool – Substation Prototype – Excel).</td>
</tr>
<tr>
<td></td>
<td>Click “Enable Content”.</td>
</tr>
<tr>
<td>2</td>
<td>Goes to “Grid Modernization: Metrics Analysis, Physical Security Input Tool”.</td>
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</tbody>
</table>
Left side represents the “Baseline” case. Choose either Substation-> In Building or Substation-> Not in Building (for this example choose Substation-> In Building) and set # of Significant\(^1\) to “1”, and Less Significant\(^2\) leave at “0”.

Click Substation-> In Building; this will take you to response input. Please use the left side responses. You’ll notice tabs along the top, in which you will answer to what you have at that particular substation. (Example: Does the facility have a security force? Yes or no. Just identify if the facility has a security force.) Continue with the remaining questions under this tab. Then hit “Submit”.

Go to the next tab “Security Management” and continue answering the questions under each tab until you get to the end “Building Envelope”.

Once finished, use the “Back to Switchboard”. This step takes you back to the main page “Grid Modernization: Metrics Analysis, Physical Security Input Tool”. You will notice that the PMI score has changed reflecting the responses that you entered.

Click the “Generate Report” button and there will be an update of an Excel graphic (probably behind the “Grid Modernization: Metrics Analysis, Physical Security Input Tool”).

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\(^1\) This determination is based solely on the perspective of the facility and is not to be related to utility-wide compliance issues.

\(^2\) This determination is based solely on the perspective of the facility and is not to be related to utility-wide compliance issues.
A Word report will then be generated (GMLCSubstationPMIOutput.docx). A small box will appear stating “Report Completed”. Click “OK”.

Click on the graphics so they come to the front, or you may have to slide the “Grid Modernization: Metrics Analysis, Physical Security Input Tool” window to the side to see the graphics window. The graphics shows your PMI in the different focus areas of the questions. The two charts show “Substation not in a building – Significant” and “Substation not in a Building – Less Significant”.

Under development is a step that provides you the baseline for that particular facility. Additionally, you will see a chart that provides the top 10 items that you can consider to increase your PMI score. You can identify items on that list that your company can afford to upgrade.

This step provides you the opportunity to determine if upgrades to your protection items will increase or decrease your PMI score. Use the “Scenario” (right side of the chart) to provide those upgrades.

Click Substation-> In Building; this will take you to the response input area. Please use the response fields on the page’s left side. You will notice tabs along the top, in which you will provide answers on what you have at that particular substation. While in the Scenario tab, provide any updates that you may want to apply to the report. (Example: Does the facility have a security force? Yes or no. In the base input you may have answered “No”. If your facility has acquired a security force then answer “Yes”.) Continue with the remaining questions under this tab. Then hit “Submit”. You will
notice on the left side of the screen in the base model that your responses have a “Purple diamond” showing your base line responses.

Go to the next tab, “Security Management,” and continue answering the questions under each tab until you get to the end, “Building Envelope”.

Push the “Generate Report” button and there will be a graphic in Excel that gets updated (probably behind the “Grid Modernization: Metrics Analysis, Physical Security Input Tool”) and a Word report will be generated (GMLCSubstationPMIOutput.docx). A small box will appear stating “Report Completed”. Click “OK.

Click on the graphics so they come to the front, or you may have to slide the “Grid Modernization: Metrics Analysis, Physical Security Input Tool” window to the side to see the graphics window. The graphics shows your PMI in the different areas you answered the questions. The two charts show “Substation not in a building – Significant” and “Substation not in a Building – Less Significant.”

Under development is a step that provides you the PMI score using the updates in which you answered for that particular facility. Additionally, you will see a chart that provides the top 10 items that you can consider to increase your PMI score. You can identify items on that list that your company can afford to upgrade.
### Protective Measures Index Quick User Guide

#### TLP:WHITE – Disclosure is not limited

| 16 | You can rerun the “Scenario” using upgrades to your security posture to help increase your PMI scores running the same processes above (Steps 8–15). |

**Products**

1. Suggested upgrades based on applied scenarios to increase scores.
2. Calculated scores for baseline and scenario data entry and summary information, including graphs.
3. Suggested protection enhancements for consideration to improve scores.