


Evolving Powerco's 11kV Network Models

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What do I want to achieve?

- Create a geographical electrical model
- Improve model accuracy

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Why?

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What is ArcMap GIS and PSS SINCAL?

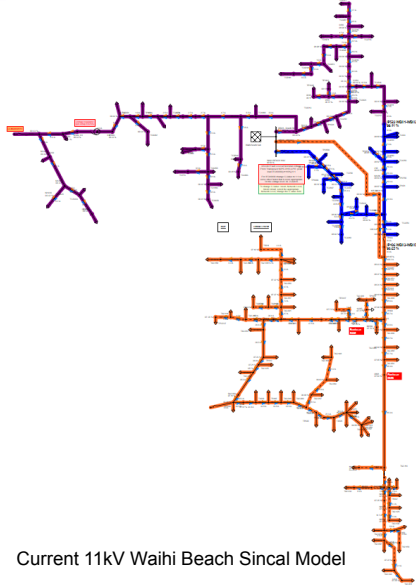


ArcGIS

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Current Sincal Models



Pros

- Schematic drawing style.
- Script shows missing components from ArcMap GIS.
- Powerco's standard library.
- Minimal nodes and elements.

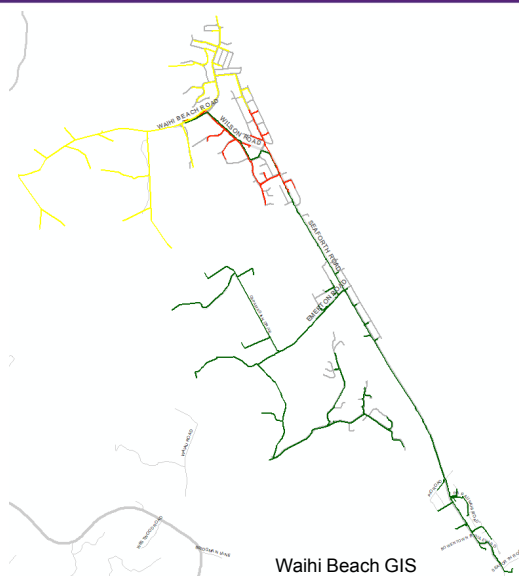
Cons

- Models are currently drawn manually.
- Slow to update.
- Not geographically accurate.
- Size codes are only checked by newest date in the update script.

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Current GIS Data



Pros

- Geographically marked.
- 99% of all size codes are labelled with something other than Unknown.
- Transformer sizes.
- Location of switch points open and closed.
- Defines cable or overhead line.

Cons

- Some inaccurate or incomplete data.
- Bigger area harder to navigate.
- Can be unclear with conductors crossing over each other.

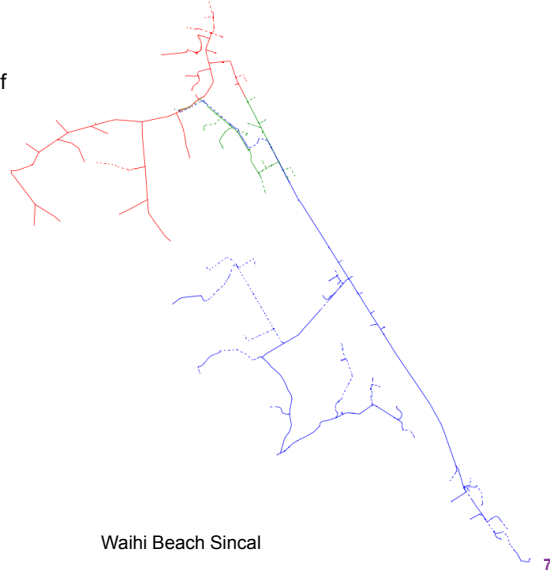
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GIS Data import to Sincal

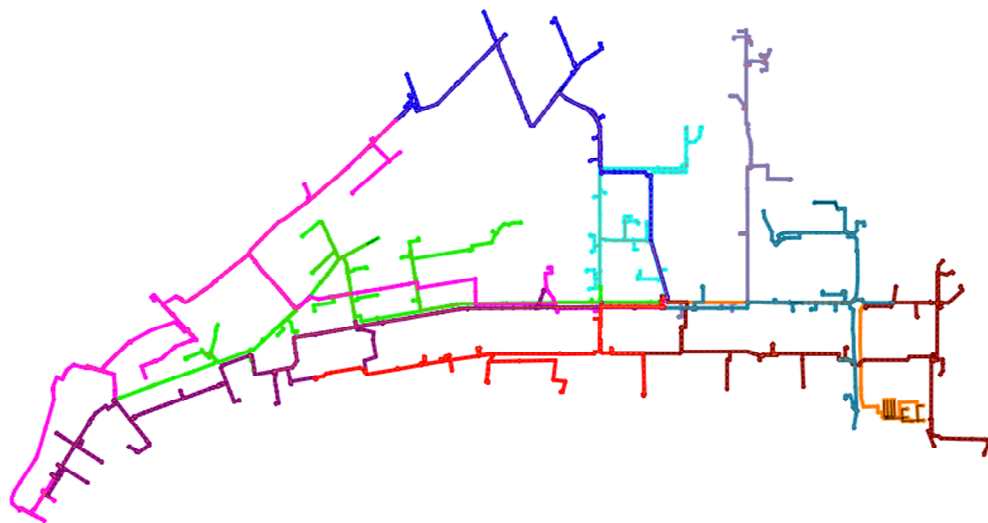
Key Features

- Geographically marked with correct lengths of conductors.
- Updated semi automatically.
- All size codes are matched with GIS.
- Look inside switch units.
- Google maps background.
- Possibility to pull out other data.

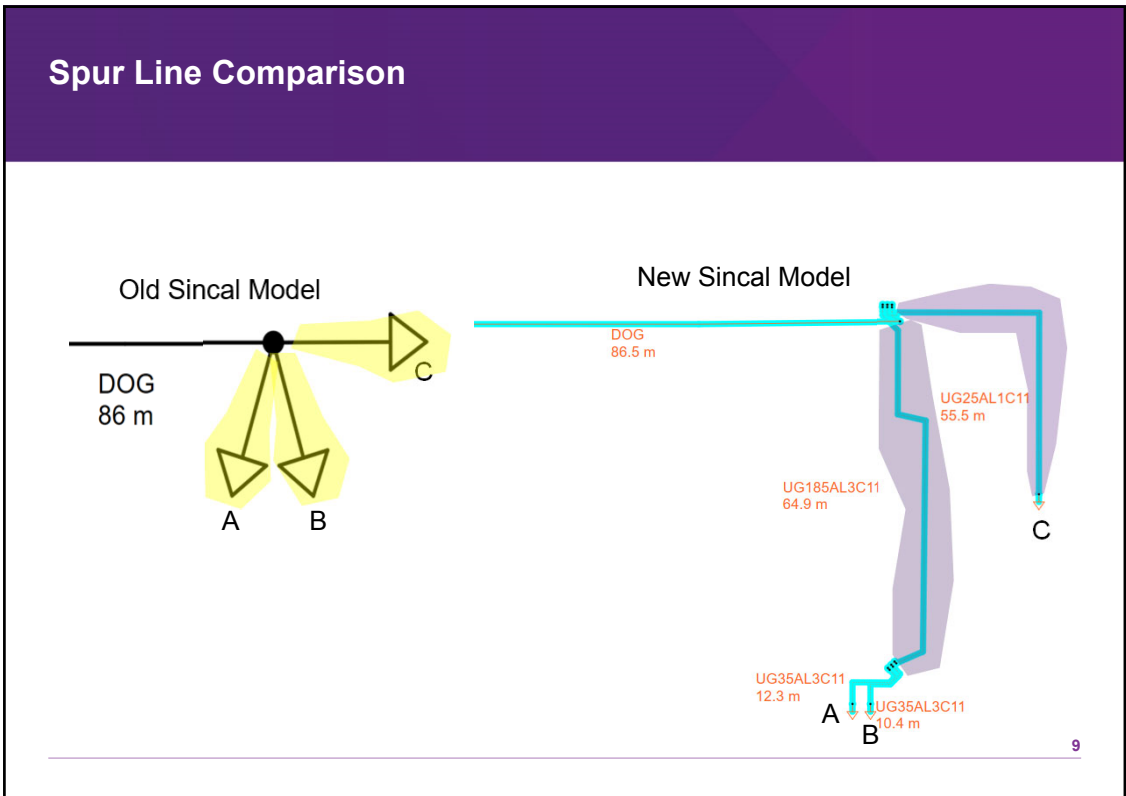


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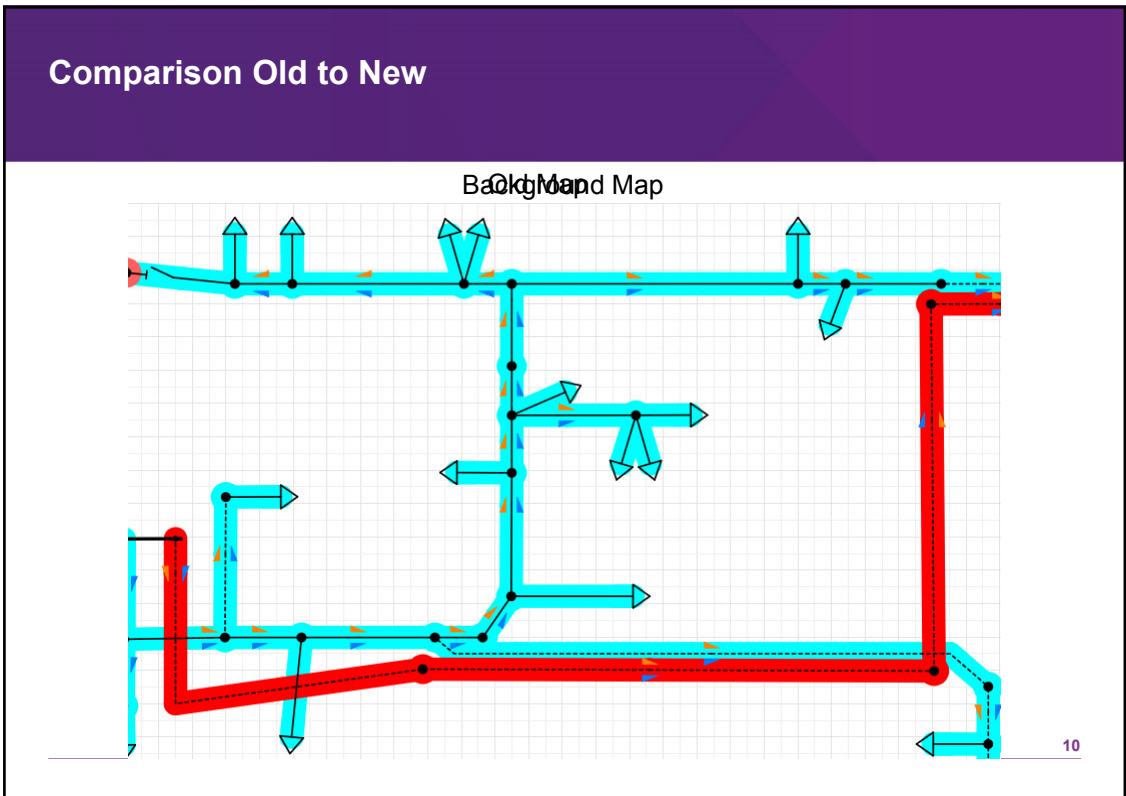
What it first looks like.



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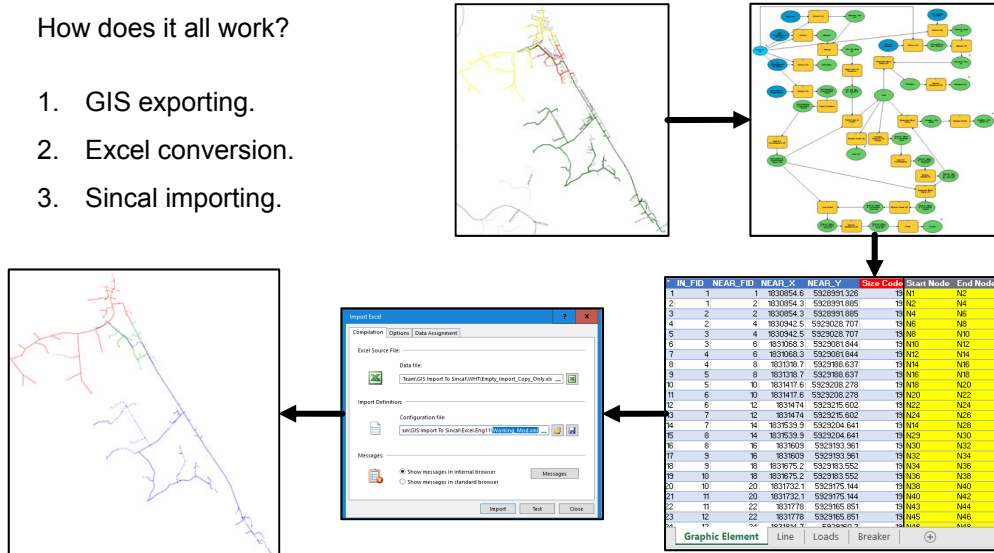


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Data Conversion

How does it all work?

1. GIS exporting.
2. Excel conversion.
3. Sincal importing.



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What's Next?

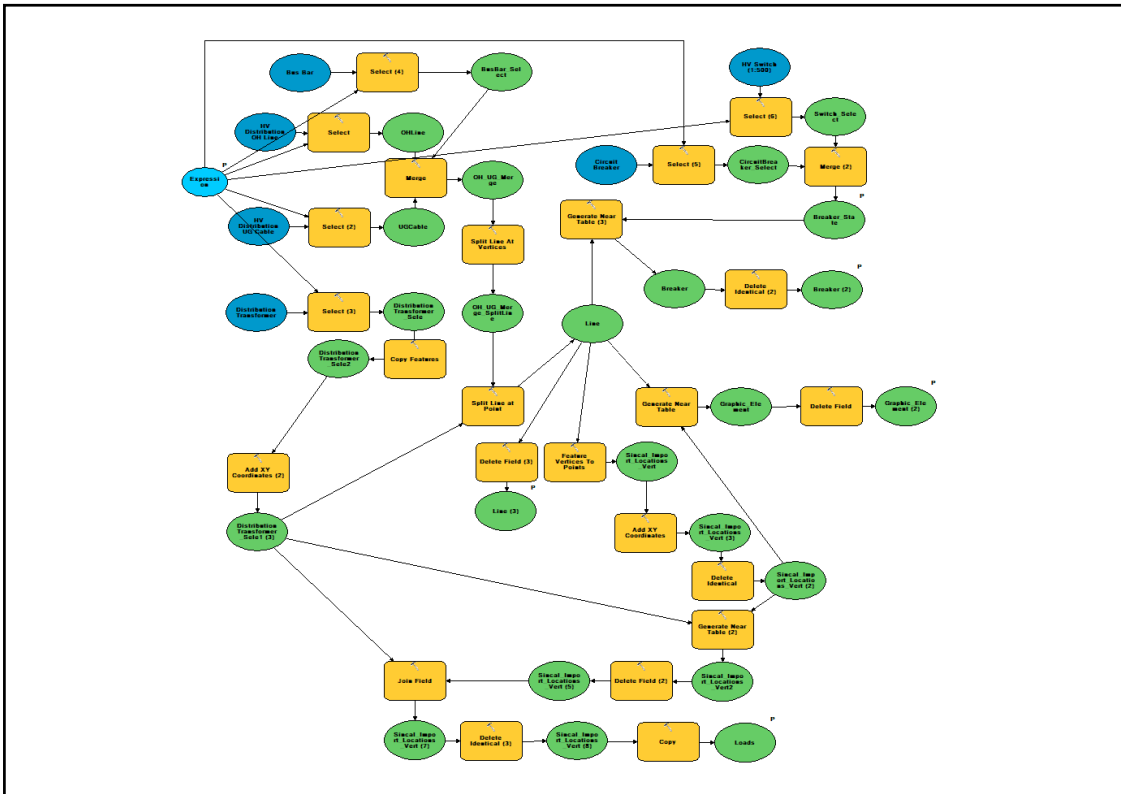
- Automate update process.
- Import protection settings.
- Add other voltage levels.

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The End....

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