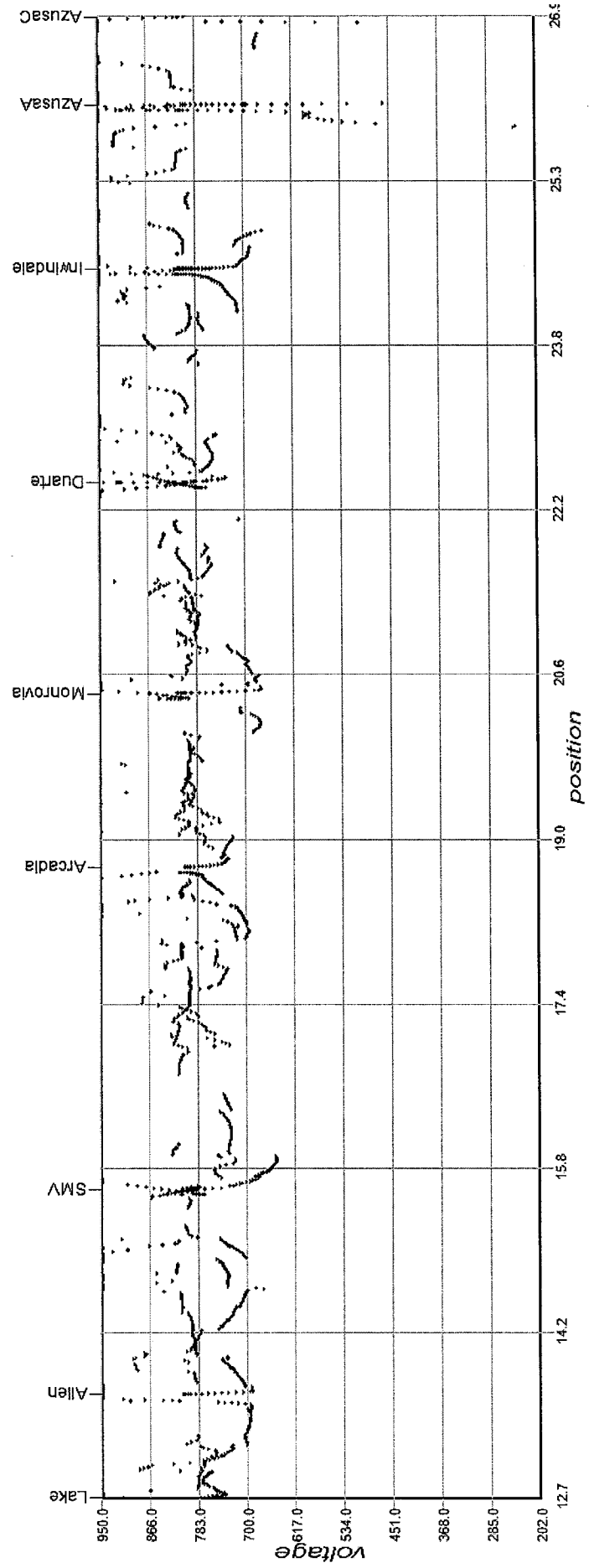


Figure 15 - Train voltage for Case 3D08 (Citrus Substation out of service)



## 6.0 SUMMARY AND CONCLUSIONS

The Foothill Extension can be provided with adequate power to support the anticipated "worst-case" service pattern of 3-car trains at 5 minute headway on Segment 1 of the Foothill Extension with ten 1.5 MW rectifier substations.

It is essential the substations be provided at Michilinda and Soldano for the system to be viable.

Simulations were run with a full catenary system for the new alignment. However, due to voltage drop issues, a double messenger wire arrangement is required between the following substations:

- Yard to Bus Center
- Bus Center to Irwindale