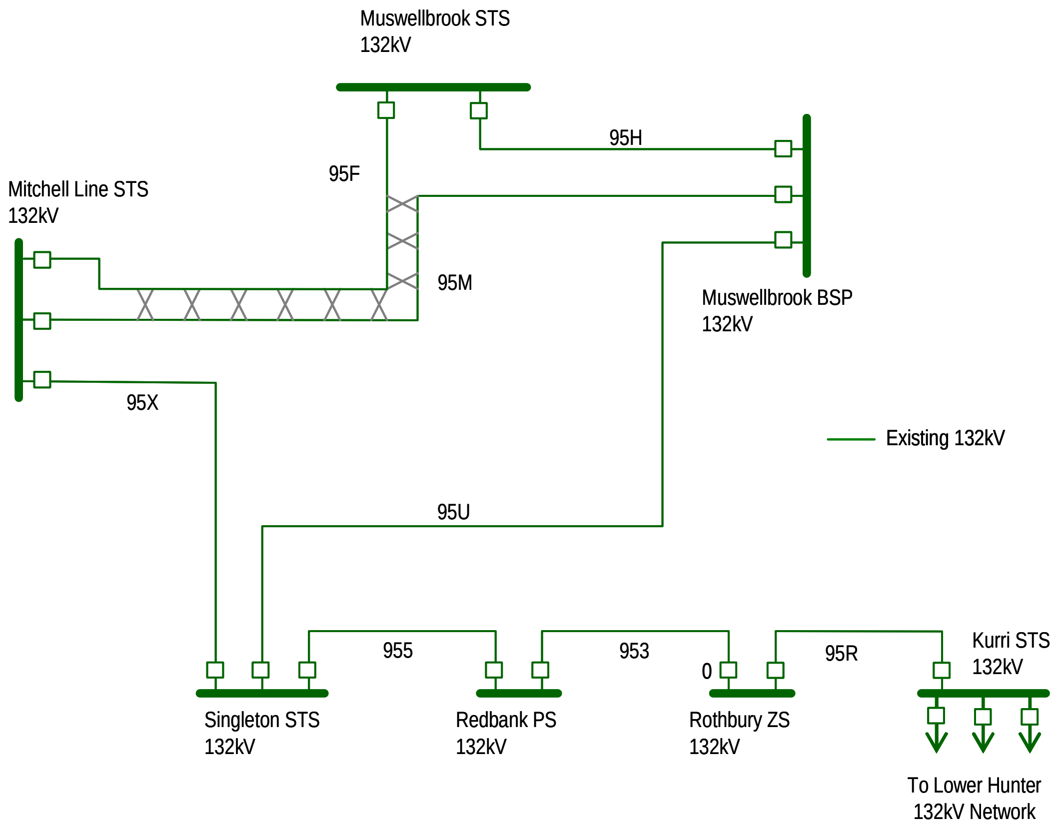
DEMAND MANAGEMENT SCREENING TEST

95R & 953 132kV Feeders

Current Supply Arrangements

Singleton 132/66kV STS is normally supplied at 132kV via feeder 95U and 95X from Muswellbrook BSP and Mitchell Line STS respectively. Feeder 953 forms a normally open connection between Rothbury zone substation and Redbank Power Station.

Voltage issues presently exist on the 132kV network supplying Singleton STS under certain outage scenarios.



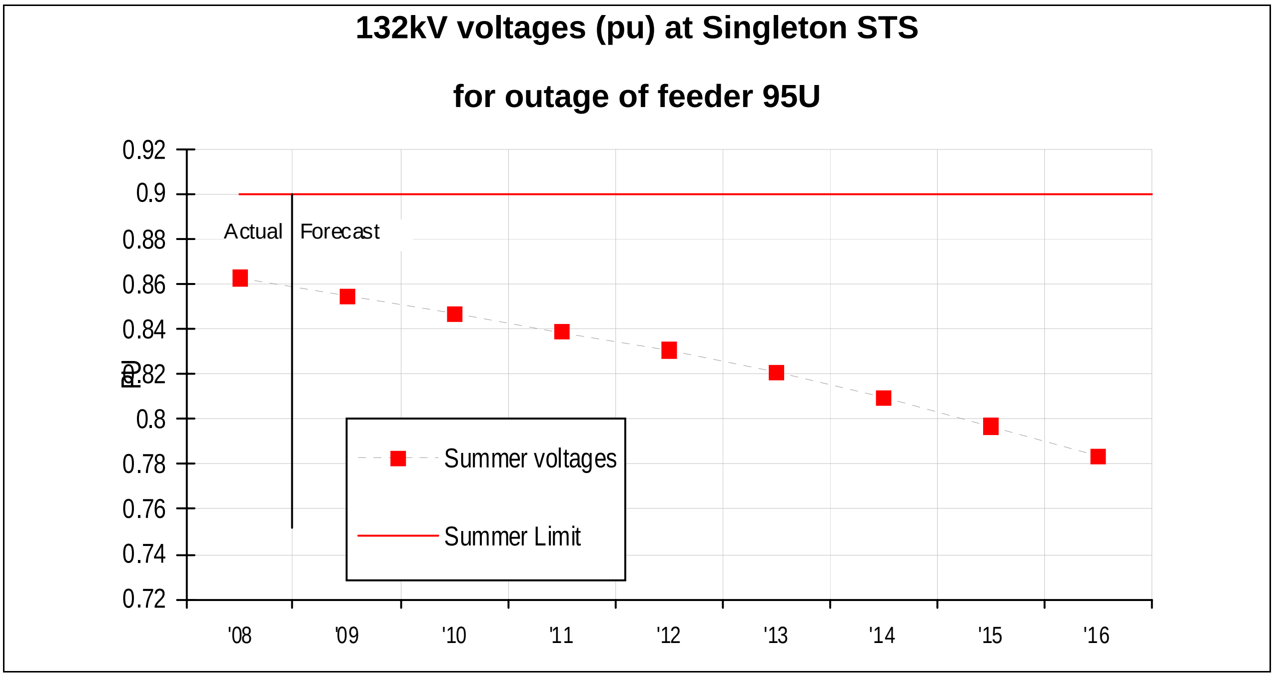
Singleton STS provides 66kV supply to Branxton, Hunter Valley No.1, Lemington, Mitchells Flat, Mt Thorley, Newdell, Singleton, and Singleton North zone substations, and a number of HV customers including Ashton Mine, Glennies Creek Colliery, Glennies Creek Generator, Hunter Valley No.2, Lemington Mine, Newdell Mine, South Lemington Mine, United Colliery, and Wambo No.1.

Singleton network area has a diverse range of customers including residential customers, light to heavy industrial operations, coal mines, agriculture, vineyards and wineries, dairy and beef farms, and horse studs.

Supply Capacity and Demand Forecast

Summer is the critical season for voltages on the 132kV network supplying Singleton STS.

The voltage on the Singleton STS 132kV busbar is presently below the applicable limit for the case of an outage on feeder 95U, and this is expected to deteriorate as load increases in the future.



Supply Strategy Option

The proposed supply side solution is to augment to capacity of 132kV feeders 95R and 953 to allow these feeders to be operated normally closed.

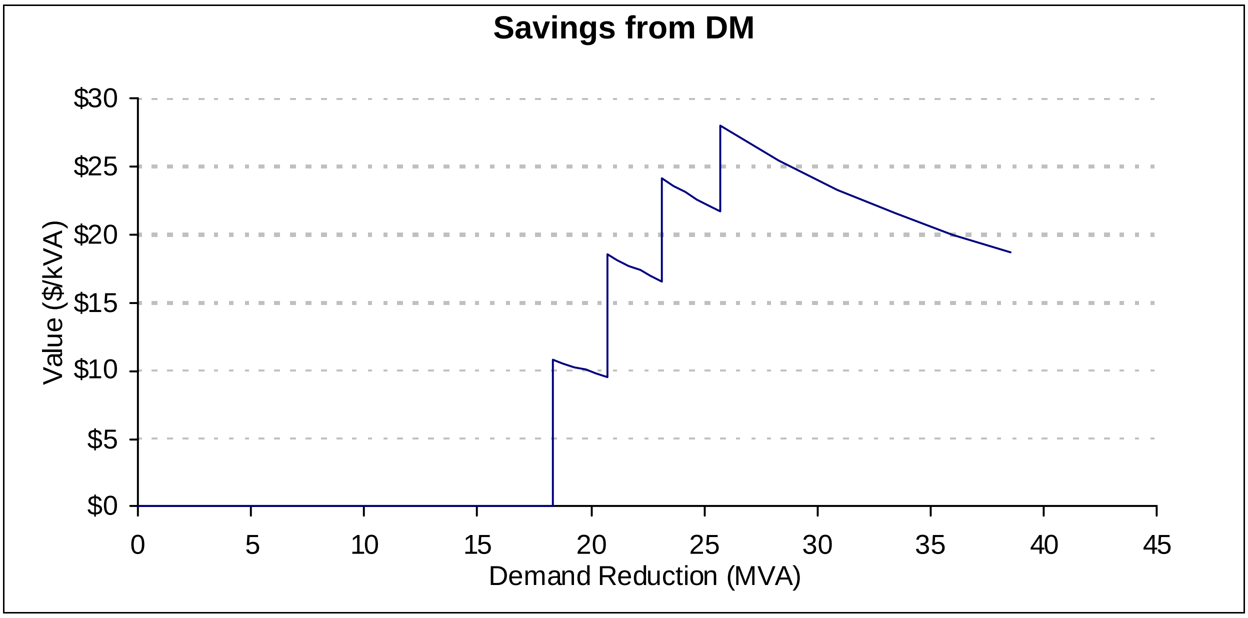
The estimated cost of this project is $2.7m. The proposed commissioning date is November 2009. A decision on this investment must be made in May 2009.

Required Demand Management Characteristics

If demand at Singleton STS could be reduced by 18.3MVA by summer 2009/10, then voltages would be within acceptable limits and the proposed investment could be deferred for 1 year. The savings from this deferral is $200,000, or $11/kVA, which is low.

If demand could be reduced by 20.7MVA before summer 2010/11, then the investment could be deferred for 2 years. The savings from this deferral is $380,000, or $19/kVA.

If demand could be reduced by 23.1MVA before summer 2011/12, then the investment could be deferred for 3 years. The savings from this deferral is $560,000, or $24/kVA.



The demand reduction requirement is high in absolute and relative terms. The potential saving is low, and the timeframe before and investment decision must be made is short. It is therefore not considered reasonable to expect that demand management options could cost effectively defer the proposed investment.

Recommendation

Based on this analysis it is not considered reasonable to expect that it would be cost-effective to postpone the proposed supply-side solution by implementing demand management strategies.