

# Network Capability Incentive Parameter Action Plan (2014-2019)

<b>Project Number</b>	18
<b>Project Priority</b>	5
<b>Transmission Circuit / Injection Point</b>	████ Substation
<b>Project</b>	Dynamic rating of █████ Substation supply transformers
<b>Scope of works</b>	Purchase and install dynamic rating, monitoring, control and communication units on █████ supply transformers █████ and implement dynamic rating functionality. Implement dynamic rating functionality of █████ and █████ as these transformers already have DRMCC's installed.
<b>Reasons to undertake the project</b>	████ Substation has the heaviest loaded transformers in the transmission network. ████ and █████ operate in parallel as do █████ and █████. The loss of any one transformer will result in the remaining being overloaded and result in the connected customer (████) needing to reduce load to keep equipment within rating. Any reduction in load for █████ has a detrimental and costly impact on their production since it is a process based plant.
<b>Current value of the limit</b>	The transformers █████ and █████ have a current firm limit of 2 █████, █████ and █████ have firm rating of █████.
<b>Target limit</b>	Availability of dynamic ratings from the transformers █████, █████, █████ and █████ at █████ Substation. Application of dynamic ratings of the transformers referred above in real time operation.
<b>Priority project improvement target</b>	Enable █████ to continue plant production for longer than █████ hours in the event of loss of any of █████ or █████.
<b>Completion date</b>	June 2015
<b>Capital cost</b>	\$180,000
<b>Operating cost</b>	\$20,000
<b>Market Benefit</b>	Full utilisation of transformer capacity and capability as per the improvement target above. The transformers will be able to supply in excess of their name plate rating in the event of loss of any one of their associated parallel unit. Taking into account the dynamic rating and ability to monitor temperature increase and life degradation of the transformers, it will enable the █████ plant to run at normal load for longer duration without the need for load reduction to suit transformer name plate rating. The annualised market benefit is estimated at \$507k.