# **Capital Growth NPV Assumptions**

### **Greenfields Growth Projects and Alternatives**

#### The Greenfields NPV assessment assumptions:

- 1. The NPV assessment has been assessed on a pre-tax nominal basis, with inflation estimated at 2.5% based on the AGA response to the ERA draft decision.
- 2. The NPV assessment utilises the tariffs from the AGA response to the ERA draft decision. This is alignment with the NGR 79 (4) (a).
- 3. The discount rate used is the 7.64% post-tax nominal WACC as implicit in the tariffs used, aligning with NGR 79 (4) (c).
- 4. The assessment period is the regulatory life of the primary asset; in this case meters and services which has an asset life of 25 years.
- 5. Revenues are lagged by one year after connection. This is to offset the lag in usage whilst the connections usage profile normalises.
- 6. The average usage rates for new customers are as defined by the CORE forecasting model, starting at 13.6GJ annually for B3 connections. As this is most reflective of the ongoing usage patterns of new connections.
- 7. The average usage rates for new customers are as defined by the CORE forecasting model, starting at 13.6GJ annually for B3 connections and 123.7GJ for B2 connections.
- 8. The B3 forecast connections are based on the ECS forecast adjusted for the introduction of the AL10 meter. The B2 forecast connections are based on the CORE model adjusted for the introduction of the AL10 meter.
- 9. The capital cost of installation is based on the average cost of connection and meters and services in alignment with AGA's response to the ERA draft decision.
- 10. The NPV model incorporates the marginal operating costs associated B3 connections. This is calculated based on the marginal operating and UAFG costs identified the AA4 tariff model used by AGA in response to the ERA draft decision.

#### The Brownfields lagged install high penetration NPV assessment assumptions:

1. The NPV assessment has been assessed on a pre-tax nominal basis, with inflation estimated at 2.5% based on the AGA response to the ERA draft decision.

- 2. The NPV assessment utilises the tariffs from the AGA response to the ERA draft decision. This is alignment with the NGR 79 (4) (a).
- 3. The discount rate used is the 7.64% post-tax nominal WACC as implicit in the tariffs used, aligning with NGR 79 (4) (c).
- 4. The assessment period is the regulatory life of the primary asset; in this case meters and services which has an asset life of 25 years.
- 5. Revenues are lagged by one year after connection. This is to offset the lag in usage whilst the connections usage profile normalises.
- 6. The average usage rates for new customers are as defined by the CORE forecasting model, starting at 13.6GJ annually for B3 connections and 123.7GJ for B2 connections.
- 7. The capital cost of the projects reflects updated connections and costing the forecast open trench mains at closed trench rates.
- 8. The B3 forecast connections are based on the ECS forecast adjusted for the introduction of the AL10 meter. The B2 forecast connections are based on the CORE model adjusted for the introduction of the AL10 meter.
- 9. The NPV model incorporates the marginal operating costs associated B3 connections. This is calculated based on the marginal operating and UAFG costs identified the AA4 tariff model used by AGA in response to the ERA draft decision.

#### The Brownfields lagged install low penetration NPV assessment assumptions:

- 1. The NPV assessment has been assessed on a pre-tax nominal basis, with inflation estimated at 2.5% based on the AGA response to the ERA draft decision.
- 2. The NPV assessment utilises the tariffs from the AGA response to the ERA draft decision. This is alignment with the NGR 79 (4) (a).
- 3. The discount rate used is the 7.64% post-tax nominal WACC as implicit in the tariffs used, aligning with NGR 79 (4) (c).
- 4. The assessment period is the regulatory life of the primary asset; in this case meters and services which has an asset life of 25 years.
- 5. Revenues are lagged by one year after connection. This is to offset the lag in usage whilst the connections usage profile normalises.

- 6. The average usage rates for new customers are as defined by the CORE forecasting model, starting at 13.6GJ annually for B3 connections and 123.7GJ for B2 connections.
- 7. The capital cost of the projects reflects updated connections and costing the forecast open trench mains at closed trench costing and brownfields connections costs.
- 8. The B3 forecast connections are based on the ECS forecast adjusted for the introduction of the AL10 meter. The B2 forecast connections are based on the CORE model adjusted for the introduction of the AL10 meter. These connection rates have been estimated at 35% of the original forecast as these are the penetration rates seen in areas where as SECWA AGA had gone in after the event to install gas mains in developed areas such as Falcon and parts or Geraldton.
- 9. The NPV model incorporates the marginal operating costs associated B3 connections. This is calculated based on the marginal operating and UAFG costs identified the AA4 tariff model used by AGA in response to the ERA draft decision.

### **Baldivis reinforcement**

- 1. The NPV assessment has been assessed on a pre-tax nominal basis, with inflation estimated at 2.5% based on the AGA response to the ERA draft decision.
- 2. The NPV assessment utilises the tariffs from the AGA response to the ERA draft decision. This is alignment with the NGR 79 (4) (a).
- 3. The discount rate used is the 7.64% post-tax nominal WACC as implicit in the tariffs used, aligning with NGR 79 (4) (c).
- 4. The assessment period is the regulatory life of the primary asset; in this case the high pressure steel mains extension which has an asset life of 80 years.
- 5. Revenues are lagged by one year after connection. This is to offset the lag in usage whilst the connections usage profile normalises.
- 6. Any capital expenditure has a life shorter than the assessment period; such as the meters and services have replacement costs are included at their end of life.
- 7. The average usage rates for new customers are as defined by the CORE forecasting model, starting at 13.6GJ annually.
- 8. AGA have used the Directions 2031 as usual growth forecast as the basis for forecast dwelling development plan.
- 9. AGA has assumed a penetration rate of 75% based on its broad penetration rate within the Mid-West and South-West network. It is of note that more recently developed areas such as Butler and Aubin Grove have penetration rates higher than 85%.
- 10. The NPV model incorporates the marginal operating costs associated B3 connections. This is calculated based on the marginal operating and UAFG costs identified the AA4 tariff model used by AGA in response to the ERA draft decision.

## **Two Rocks Risk Reduction Option 2**

- 1. The NPV assessment has been assessed on a pre-tax nominal basis, with inflation estimated at 2.5% based on the AGA response to the ERA draft decision.
- 2. The NPV assessment utilises the tariffs from the AGA response to the ERA draft decision. This is alignment with the NGR 79 (4) (a).
- 3. The discount rate used is the 7.64% post-tax nominal WACC as implicit in the tariffs used, aligning with NGR 79 (4) (c).
- 4. The assessment period is the regulatory life of the primary asset; in this case the high pressure steel mains extension which has an asset life of 80 years.
- 5. Revenues are lagged by one year after connection. This is to offset the lag in usage whilst the connections usage profile normalises.
- 6. Any capital expenditure has a life shorter than the assessment period; such as the meters and services have replacement costs are included at their end of life.
- 7. The average usage rates for new customers are as defined by the CORE forecasting model, starting at 13.6GJ annually.
- 8. AGA have used the Directions 2031 as usual growth forecast as the basis for forecast dwelling development plan.
- 9. AGA has assumed a penetration rate of 75% based on its broad penetration rate within the Mid-West and South-West network. It is of note that more recently developed areas such as Butler and Aubin Grove have penetration rates higher than 85%.
- 10. The NPV model incorporates the marginal operating costs associated B3 connections. This is calculated based on the marginal operating and UAFG costs identified the AA4 tariff model used by AGA in response to the ERA draft decision.

## **Two Rocks Risk Reduction Option 3**

NPV assumptions:

- 1. The NPV assessment has been assessed on a pre-tax nominal basis, with inflation estimated at 2.5% based on the AGA response to the ERA draft decision.
- 2. The NPV assessment utilises the tariffs from the AGA response to the ERA draft decision. This is alignment with the NGR 79 (4) (a).
- 3. The discount rate used is the 7.64% post-tax nominal WACC as implicit in the tariffs used, aligning with NGR 79 (4) (c).
- 4. The assessment period is the regulatory life of the primary asset; in this case the high pressure steel mains extension which has an asset life of 80 years.
- 5. Revenues are lagged by one year after connection. This is to offset the lag in usage whilst the connections usage profile normalises.
- 6. Any capital expenditure has a life shorter than the assessment period; such as the meters and services have replacement costs are included at their end of life.
- 7. The average usage rates for new customers are as defined by the CORE forecasting model, starting at 13.6GJ annually.
- 8. AGA have used the Directions 2031 as usual growth forecast as the basis for forecast dwelling development plan.
- 9. AGA has assumed a penetration rate of 75% based on its broad penetration rate within the Mid-West and South-West network. It is of note that more recently developed areas such as Butler and Aubin Grove have penetration rates higher than 85%.
- 10. The NPV model incorporates the marginal operating costs associated B3 connections. This is calculated based on the marginal operating and UAFG costs identified the AA4 tariff model used by AGA in response to the ERA draft decision.
- 11. The capital costs assumed for Option 3 is in 2016 and 4.90m in 2020 the incremental cost of supporting growth in the area.

### **Peel Reinforcement**

- 1. The NPV assessment has been assessed on a pre-tax nominal basis, with inflation estimated at 2.5% based on the AGA response to the ERA draft decision.
- 2. The NPV assessment utilises the tariffs from the AGA response to the ERA draft decision. This is alignment with the NGR 79 (4) (a).
- 3. The discount rate used is the 7.64% post-tax nominal WACC as implicit in the tariffs used, aligning with NGR 79 (4) (c).
- 4. The assessment period is the regulatory life of the primary asset; in this case the high pressure steel mains extension which has an asset life of 80 years.
- 5. Revenues are lagged by one year after connection. This is to offset the lag in usage whilst the connections usage profile normalises.
- 6. Any capital expenditure has a life shorter than the assessment period; such as the meters and services have replacement costs are included at their end of life.
- 7. The average usage rates for new customers are as defined by the CORE forecasting model, starting at 13.6GJ annually.
- 8. AGA have used the Directions 2031 business as usual growth forecast as the basis for forecast dwelling development plan.
- 9. AGA has assumed a penetration rate of 75% based on its broad penetration rate within the Mid-West and South-West network. It is of note that more recently developed areas such as Butler and Aubin Grove have penetration rates higher than 85%.
- 10. The NPV model incorporates the marginal operating costs associated B3 connections. This is calculated based on the marginal operating and UAFG costs identified the AA4 tariff model used by AGA in response to the ERA draft decision.

### **Capel to Busselton Reinforcement**

- 1. The NPV assessment has been assessed on a pre-tax nominal basis, with inflation estimated at 2.5% based on the AGA response to the ERA draft decision.
- 2. The NPV assessment utilises the tariffs from the AGA response to the ERA draft decision. This is alignment with the NGR 79 (4) (a).
- 3. The discount rate used is the 7.64% post-tax nominal WACC as implicit in the tariffs used, aligning with NGR 79 (4) (c).

- 4. The assessment period is the regulatory life of the primary asset; in this case the high pressure steel mains extension which has an asset life of 80 years.
- 5. Revenues are lagged by one year after connection. This is to offset the lag in usage whilst the connections usage profile normalises.
- 6. Any capital expenditure has a life shorter than the assessment period; such as the meters and services have replacement costs are included at their end of life.
- 7. The average usage rates for new customers are as defined by the CORE forecasting model, starting at 13.6GJ annually.
- 8. AGA have used the Future of Busselton 2050 as usual growth forecast as the basis for forecast dwelling development plan.
- 9. AGA has assumed a penetration rate of 75% based on its broad penetration rate within the Mid-West and South-West network. It is of note that more recently developed areas such as Butler and Aubin Grove have penetration rates higher than 85%.
- 10. The NPV model incorporates the marginal operating costs associated B3 connections. This is calculated based on the marginal operating and UAFG costs identified the AA4 tariff model used by AGA in response to the ERA draft decision.