Kaukapakapa Area Residents and Ratepayers Association

Kaukapakapa Residents and Ratepayers Association Incorporated ("KARRA") hereby advises that it **opposes** the resource consent applications (Applications) in their entirety.

KARRA was constituted in 1992 to provide a forum for the discussion of issues and concerns affecting the residents of Kaukapakapa. Amongst other things KARRA is charged with:

a) ensuring the views, aspirations and concerns of residents are suitably represented to both the Rodney District Council (RDC) and the Auckland Regional Council(ARC);

b) encouraging the continued upgrading of SH16 (Kaipara Coast Highway) and other roads in the area to ensure safe access; and

c) doing anything necessary or helpful to promote and maintain the natural charm and character of the area.

KARRA strongly believes it is vital that the open country and rural character of the District are maintained at all costs. It sees the aspirations and values which the Councils have subscribed to, being systematically compromised if this power station is built and allowed to operate.

KARRA is making this submission because it considers the activities proposed by the Applications will adversely affect Kaukapakapa and its surrounds in that the long standing rural character and charm of the area will be severely compromised by the introduction of such a major industrial facility. The building of a Power Station will impose environmental and social costs on Kaukapakapa residents. It will lead to future pressure for development in Kaukapakapa on the basis that the area has reduced rural character.

KARRA proposes a lapse period of **five** years for each of the resource consents applied for by the Applicant.

Note! KARRA have assumed that each Application requires a separate submission. There is a degree of repetition in the overall submission.

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Neville Miller (KARRA Chairman)

ARC Land Use Consent 34451 to undertake earthworks associated with the construction of the power station site platform, landscaping, access roads and the realignment and upgrade of the Inland Road/SH16 intersection

Air Quality & Emissions

In the 'Assessment of Environmental Effects' the Applicant states there are 40 residences within 1km of the site. Residents collect their drinking water from roof run-off and the most populated areas of Kaukapakapa are downwind of the site. KARRA is concerned that dust and vehicle/engine emissions will affect the potability of the water and have an adverse health impact on local residents.

URS New Zealand Limited ("URS") obtained meteorological data from the Cornwallis and Woodhill weather stations, in order to predict concentration averages for comparison with air quality standards. KARRA is concerned that the closest of these weather stations, Woodhill, is at least 10km from the power station site and the two areas are separated by steep terrain. It is not clear from the URS assessment whether data collected from the Punganui monitoring station on site contains the required hourly values that will enable a comparison with air quality standards.

Weather patterns in the vicinity of the site are very localized. KARRA believes that data from the Woodhill and Cornwallis weather stations is not indicative of the meteorological patterns around the power station site. For example, the windflows from Woodhill and Cornwallis are predominantly westerly, but the Pungaui monitoring station on site indicates that wind flows are predominantly east-northeast and south-southwest.

URS advise that there is currently no air quality monitoring data available for the Kaipara area, other than the information gathered by their company for the Applicant. URS notes that background ambient fine particulate (PM10) concentrations at the site currently exceed the Auckland Regional Council Rural Air Quality targets and KARRA is concerned about the effects of a further increase in particulate matter during the construction period.

In their assessment of the effects of emissions on potentially sensitive areas, URS claims that *"There is a Department of Conservation reserve located a few kilometers to the north of the site, along the edge of the Kaipara Harbour. However, due to the separation distance, it will not be affected by construction activity, and is unlikely to be sensitive to operational emissions from the site."* URS is incorrect. The 210 hectare Department of Conservation Scientific Reserve is less than 1km from the construction site and is part of a larger area designated by Auckland Regional Council as an 'Outstanding Natural Landscape', and by Rodney District Council as a 'Significant Natural Area'. The adjacent Kaukapakapa River is an 'Inland Water Protection Zone Area' in the Proposed District Plan 2000 and a 'Wetland Management Area' in the Proposed Auckland Regional Plan: Air, Land and Water Plan. KARRA believes that the effect of emissions needs to be investigated properly by URS and the Applicant, given the close(r) proximity of these ecologically significant areas.

Traffic

The earthworks activities associated with the power station will result in a significant increase in daily truck movements along Kahikatea Flat Road. The applicant proposes to direct most of the additional heavy vehicle construction traffic along this road and this will have a major impact on the road surface, as well as road safety and road users generally. This is particularly pertinent given the well documented budgetary constraints the Council is already under with regard to the maintenance of its roading network.

The traffic volume data used by the Applicant was sourced from 2002-2005. As the 2007 traffic volume data is available, KARRA believes the modeling for vehicle emissions is inaccurate and needs to be re-visited. Due consideration has not been given by the Applicant to the increase in traffic volume from 2005-2007.

Kahikatea Flat Road is the main thoroughfare for the majority of Kaukapakapa residents who commute in and out of the area. Buses also carry students along this road to Wentworth, Kingsway, Orewa, Carmel and Westlake Colleges, and Wainui, Waitoki, and Dairy Flat Primary Schools.

An application for a cleanfill operation off Kahikatea Flat Road was notified recently and submissions are currently under consideration. If that resource consent is approved, the cleanfill operation is expected to result in an additional 220 truck movements (86% increase) along Kahikatea Flat Road each day. Given that this is also Genesis Energy's preferred route for its heavy construction vehicles, KARRA believes additional traffic generated by the proposed cleanfill needs to be taken into consideration by the Councils.

KARRA have additional safety concerns in that this route along Kahikatea Flat Road is a designated alternative route North. Transit regularly advertise in the national and local press advising holiday makers to use State Highway16 via Kahikatea Flat Road, during the summer season. As a result weekends during holiday periods see frequent 'nose-to-tail' queues along this route as Auckland traffic is directed away from East Coast bottle-necks. Additionally the road is extensively used by cyclists, often in quite large bike buses, is often used as a route for organised cycling events/races, and is a popular route for recreational motorcycle riders travelling in groups.

Conclusion

KARRA does not agree with the Applicant's claim that the effects of traffic and transportation in relation to the proposed Rodney Power Station will be minor. This project will generate a substantial volume of construction traffic which, coupled with the proposed earthworks, will have adverse effects on the efficiency, safety and amenity of the local roading network, the amenities of surrounding rural/residential areas, and the ecological values of the Kaukapakapa River and significant natural areas adjacent to the site.

KARRA disagrees with the Applicant's Transport Report which suggests that 'the project is able to proceed with no more than minor adverse effects on either the local or regional traffic environment.'

If granted this consent, KARRA would like the Applicant to carry out roading improvements, prior to the commencement of construction. Kahikatea Flat Road needs to be widened and passing bays constructed. KARRA would like background

(ambient) air quality closely monitored during the construction phase of the power station, to ensure environmental compliance with all consent limits. These air quality reports are to be made publicly available. Thought should also be given to the installation of water filters to existing and partially completed residences within a 3km radius of the site during the construction period.

RDC Land Use Consent 53883 to discharge dust to air during earthworks activities associated with the construction of the Rodney Power Station

Air Quality

In the Assessment of Environmental Effects the Applicant states there are 40 residences within 1km of the site. Residents collect their drinking water from roof run-off and the most populated areas of Kaukapakapa are downwind of the site. KARRA is concerned that dust and vehicle/engine emissions will affect the potability of our water and have an adverse health impact on local residents.

URS New Zealand Limited ("URS") obtained meteorological data from the Cornwallis and Woodhill weather stations, in order to predict concentration averages for comparison with air quality standards. KARRA is concerned that the closest of these weather stations, Woodhill, is at least 10km from the power station site and the two areas are separated by steep terrain. It is not clear from the URS assessment whether data collected from the Punganui monitoring station on site contains the required hourly values that will enable a comparison with air quality standards.

Weather patterns in the area are very localized. KARRA believes that data from the Woodhill and Cornwallis weather stations is not comparable to the meteorological patterns around the power station site. For example, the windflows from Woodhill and Cornwallis are predominantly westerly, but the Pungaui monitoring station on site indicates that wind flows are predominantly east-northeast and south-southwest.

URS advise that there is currently no air quality monitoring data available for the Kaipara area, other than the information gathered by their company for the Applicant. URS notes that background ambient fine particulate (PM10) concentrations at the site currently exceed the Auckland Regional Council Rural Air Quality targets and KARRA is concerned about the effects of a further increase in particulate matter during the construction period.

In their assessment of the effects of emissions on potentially sensitive areas, URS claims that *"There is a Department of Conservation reserve located a few kilometers to the north of the site, along the edge of the Kaipara Harbour. However, due to the separation distance, it will not be affected by construction activity, and is unlikely to be sensitive to operational emissions from the site."* URS is incorrect. The 210 hectare Department of Conservation Scientific Reserve is less than 1km from the construction site and is part of a larger area designated by Auckland Regional Council as an 'Outstanding Natural Landscape', and by Rodney District Council as a 'Significant Natural Area'. The adjacent Kaukapakapa River is an Inland Water Protection Zone Area. KARRA believes that the effect of emissions needs to be investigated by URS or the Applicant, given the close(r) proximity of these ecologically significant areas.

Traffic

The earthworks activities associated with the power station will result in a significant increase in daily truck movements along Kahikatea Flat Road. The applicant proposes to direct most of the additional heavy vehicle construction traffic along this road and this will have a major impact on the road surface, as well as road safety and road users generally. This is particularly pertinent given the well documented budgetary constraints the Council is already under with regard to the maintenance of its roading network.

The traffic volume data used by the Applicant was sourced from 2002-2005. As the 2007 traffic volume data is available, KARRA believes the modeling for vehicle emissions is inaccurate and needs to be re-visited. Due consideration has not been given by the Applicant to the increase in traffic volume from 2005-2007.

Kahikatea Flat Road is the main thoroughfare for the majority of Kaukapakapa residents who commute in and out of the area. Buses also carry students along this road to Wentworth, Kingsway, Orewa, Carmel and Westlake Colleges, and Wainui, Waitoki, and Dairy Flat Primary Schools.

An application for a cleanfill operation off Kahikatea Flat Road was notified recently and submissions are currently under consideration. If that resource consent is approved, the cleanfill operation is expected to result in an additional 220 truck movements (86%) along Kahikatea Flat Road each day. Given that this is also Genesis Energy's preferred route for its heavy construction vehicles, KARRA believes additional traffic generated by the proposed cleanfill needs to be taken into consideration by the Councils.

KARRA has additional safety concerns in that this route along Kahikatea Flat Road is a designated alternative route North, is extensively used by cyclists often in quite large bike buses, is often used as a route for organised cycling events/races, and is a popular route for recreational motorcycle riders travelling in groups.

Conclusion

KARRA does not agree with the Applicant's claim that the effects of traffic and transportation in relation to the proposed Rodney Power Station will be minor. This project will generate a substantial volume of construction traffic which, coupled with the proposed earthworks, will have adverse effects on the efficiency, safety and amenity of the local roading network, the amenities of surrounding rural/residential areas, and the ecological values of the Kaukapakapa River and significant natural areas adjacent to the site.

KARRA disagrees with the Applicant's Transport Report which suggests that 'the project is able to proceed with no more than minor adverse effects on either the local or regional traffic environment.'

If granted this consent, KARRA would like the Applicant to carry out roading improvements, prior to the commencement of construction. Kahikatea Flat Road needs to be widened and passing bays constructed. KARRA would like background (ambient) air quality closely monitored during the construction phase of the power station, to ensure environmental compliance with all consent limits. These air quality reports are to be made publicly available. Thought should also be given to the installation of water filters to existing and partially completed residences within a 3km radius of the site during the construction period.

ARC Discharge Permit 34213 to discharge contaminants into the air associated with the establishment, construction, operation, maintenance and upgrading of a combined cycle gas turbine power station with a maximum 480 MW capacity and associated infrastructure

Government Policy

This proposal is not consistent with Government Energy and Climate Change Policies. A ten year moratorium has been placed on new baseload thermal plants.

Air Quality

The Applicant has not confirmed whether the proposed Rodney Power Station is to operate as a baseload or peaking plant. All technical investigations and assessments by the Applicant have been carried out on a baseload configuration. Genesis Energy states in its AEE that *"worst-case mass emission rates will occur for short periods of time (approximately four hours or less) during station start-up periods."* The continual start-up and shut-down of a peaking plant will result in more concentrated emissions, and KARRA believes the Applicant has not addressed the environmental effects of a peaking plant configuration.

This Application is not consistent with the policies, objectives and rules of the Proposed Auckland Regional Plan: Air, Land and Water.

In the Assessment of Environmental Effects the Applicant states there are 40 residences within 1km of the site. Residents, throughout the district collect their drinking water from roof run-off and the most populated areas of Kaukapakapa are downwind of the site. KARRA is concerned that power plant emissions, dust and vehicle/engine emissions will affect the potability of the water and have an adverse health impact on residents.

The primary emissions from the plant include oxides of nitrogen. On Australia's National Pollutant Inventory, oxides of nitrogen are ranked as having the highest perceived risk of 90 polluting substances.

URS New Zealand Limited ("URS") obtained meteorological data from the Cornwallis and Woodhill weather stations, in order to predict concentration averages for comparison with air quality standards. KARRA is concerned that the closest of these weather stations, Woodhill, is at least 10km from the power station site and the two areas are separated by steep terrain. It is not clear from the URS assessment whether data collected from the Punganui monitoring station on site contains the required hourly values that will enable a comparison with air quality standards.

KARRA believes that data from the Woodhill and Cornwallis weather stations is not comparable to the meteorological patterns around the power station site. For example, the windflows from Woodhill and Cornwallis are predominantly westerly, but the Pungaui monitoring station on site indicates that wind flows are predominantly east-northeast and south-southwest.

URS advise that there is currently no air quality monitoring data available for the Kaipara area, other than the information gathered by their company for the Applicant. URS notes that background ambient fine particulate (PM10) concentrations at the site currently exceed the Auckland Regional Council Rural Air Quality targets and

KARRA is concerned about the potential effects of a further increase in ambient PM10 concentrations, as a result of the construction and operation of the proposed plant.

In their assessment of the effects of emissions on potentially sensitive areas, URS claims that *"There is a Department of Conservation reserve located a few kilometers to the north of the site, along the edge of the Kaipara Harbour. However, due to the separation distance, it will not be affected by construction activity, and is unlikely to be sensitive to operational emissions from the site."* URS is incorrect. The 210 hectare Department of Conservation Scientific Reserve is less than 1km from the construction site and is part of a larger area designated by ARC as an 'Outstanding Natural Landscape', and by RDC as a 'Significant Natural Area'. The adjacent Kaukapakapa River is an Inland Water Protection Zone Area. KARRA believes that the effect of emissions needs to be investigated by URS or the Applicant, given the close(r) proximity of these ecologically significant areas.

Traffic

The earthworks activities associated with the power station will result in a significant increase in daily truck movements along Kahikatea Flat Road. The applicant proposes to direct most of the additional heavy vehicle construction traffic along this road and this will have a major impact on the road surface, as well as road safety and road users generally. This is particularly pertinent given the well documented budgetary constraints the Council is already under with regard to the maintenance of its roading network.

The traffic volume data used by the Applicant was sourced from 2002-2005. As the 2007 traffic volume data is available, KARRA believes the modeling for vehicle emissions is inaccurate and needs to be re-visited. Due consideration has not been given by the Applicant to the increase in traffic volume from 2005-2007.

Kahikatea Flat Road is the main thoroughfare for the majority of Kaukapakapa residents who commute in and out of the area. Buses also carry students along this road to Wentworth, Kingsway, Orewa, Carmel and Westlake Colleges, and Wainui, Waitoki, and Dairy Flat Primary Schools.

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KARRA has additional safety concerns in that this route along Kahikatea Flat Road is a designated alternative route North, is extensively used by cyclists often in quite large bike buses, is often used as a route for organised cycling events/races, and is a popular route for recreational motorcycle riders travelling in groups.

KARRA does not agree with the Applicant's claim that the effects of traffic and transportation in relation to the proposed Rodney Power Station will be minor. This project will generate a substantial volume of construction traffic, which will have adverse effects on the efficiency, safety and amenity of the local roading network and the amenities of surrounding rural/residential areas

Conclusion

KARRA believes the granting of this consent will result in the discharge of potentially hazardous air pollutants, and will also have adverse effects on the efficiency, safety and amenity of the local roading network, the amenities of surrounding rural/residential areas, and the ecological values of the Kaukapakapa River and significant natural areas adjacent to the site.
KARRA disagrees with the Applicant's Transport Report which suggests that 'the project is able to proceed with no more than minor adverse effects on either the local or regional traffic environment.'

If this consent is approved, KARRA requests that background (ambient) air quality be closely monitored at several sites surrounding the power station, to ensure environmental compliance with all consent limits. We would expect Genesis Energy to provide air quality reports to the ARC at least every three months, and these to be made publicly available. Thought should also be given to the installation of water filters to existing and partially completed residences within a 4km radius of the site.

RDC Land use consent 53884 to undertake works on or over the surface of the Kaukapakapa River and/or to disturb and remove vegetation in relation to the construction of water intake, outfall and jetty structures

The Kaukapakapa River is designated as an 'Inland Waters Activity Protection Policy Area' in the RDC Operative Plan, an 'Inland Water Protection Zone Area' in the Proposed District Plan 2000, and a 'Wetland Management Area' in the Proposed Auckland Regional Plan; Air, Land and Water. The works proposed by the Applicant are not consistent with the objectives, policies and rules contained in these documents.

Objective 11.3.4 of the Proposed District Plan is *"To ensure that recreational or commercial activities and structures do not impede the use of inland waters, where such uses are consistent with the maintenance of natural values and the safety of users."* KARRA believes that the earthworks, vegetation removal and construction of these structures will adversely affect the river and its habitat value, and impede the navigation of vessels on the Kaukapakapa River.

The Applicant states that investigations have been carried out on recreational use and food gathering on the Kaukapakapa River. RDC have confirmed that the recreational survey and questionnaire the Applicant refers to were solely for the purposes of investigating a wastewater project beside the Kumeu/Kaipara River, that no questionnaires were distributed to Kaukapakapa, Helensville or Parakai residents, and that the questionnaire asked for information on residents' use of the Kumeu/Kaipara River – not the Kaukapakapa River. KARRA believes that the Applicant has not properly investigated the extent to which the Kaukapakapa River is used for recreational and food-gathering purposes, and how the proposed works will impact on river users.

ARC Land Use Consent 34452 to undertake works in, on and/or under the bed of the Kaukapakapa River and/or to disturb and remove vegetation in relation to the construction of water intake, outfall and jetty structures

The Kaukapakapa River is designated as an 'Inland Waters Activity Protection Policy Area' in the RDC Operative Plan, an 'Inland Water Protection Zone Area' in the Proposed District Plan 2000, and a 'Wetland Management Area' in the Proposed Auckland Regional Plan; Air, Land and Water. The works proposed by the Applicant are not consistent with the objectives, policies and rules contained in these documents.

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The Applicant claims that investigations have been carried out on recreational use and food gathering on the Kaukapakapa River. RDC have confirmed that the recreational survey and questionnaire the Applicant refers to were solely for the purposes of investigating a wastewater project beside the Kumeu/Kaipara River, that no questionnaires were distributed to Kaukapakapa, Helensville or Parakai residents, and that the questionnaire asked for information on resident's use of the Kumeu/Kaipara River – not the Kaukapakapa River. KARRA believes that the Applicant has not properly investigated the extent to which the Kaukapakapa River is used for recreational and food-gathering purposes, and how the proposed works will impact on river users.

ARC Discharge Permit 35616 to discharge treated sanitary/domestic wastewater during construction activities to land at a design wastewater flow of up to 20m³ per day

KARRA is concerned that the suggested onsite drip irrigation option will pose a risk to groundwater, given that excavation work on the site is likely to penetrate below the water table. Consideration should be given to options where the sanitary/domestic wastewater is removed from the site entirely.

ARC Water Permit 35637 to divert, take and discharge groundwater intercepted through earthworks associated with the construction of the power station site platform, landscaping, access roads and the realignment and upgrade of the Inland Road/SH16 intersection

The excavation works are likely to penetrate below the water table. KARRA is concerned about the risk of draw down and contamination of ground water supply to local residents. Adequate sediment control measures must be put in place.

ARC Water Permit 32077 to take or use up to 2,400m³ of water per day and 876,000m3 of water per year from the tidal reaches of the Kaukapakapa River

The Kaukapakapa River is designated as an 'Inland Waters Activity Protection Policy Area' in the RDC Operative Plan, an 'Inland Water Protection Zone Area' in the Proposed District Plan 2000, and a 'Wetland Management Area' in the Proposed Auckland Regional Plan; Air, Land and Water. The works proposed by the Applicant are not consistent with the objectives, policies and rules contained in these documents. KARRA notes that the Applicant's River Study acknowledges that further work is required to explain the approximately 30,000 m³ of water unaccounted for when measuring tidal flow volumes (14 Becca report on Water Supply). This discrepancy must be taken into account when considering water extraction from the river. KARRA is concerned that the quantity of water the Applicant wishes to take from the Kaukapakapa River is not sustainable, and that the water take will adversely affect the river's ecological values.

The Applicant claims that investigations have been carried out on recreational use and food gathering on the Kaukapakapa River. RDC have confirmed that the recreational survey and questionnaire the Applicant refers to were solely for the purposes of investigating a wastewater project beside the Kumeu/Kaipara River, that no questionnaires were distributed to Kaukapakapa, Helensville or Parakai residents, and that the questionnaire asked for information on resident's use of the Kumeu/Kaipara River – not the Kaukapakapa River. KARRA believes that the Applicant has not properly investigated the extent to which the Kaukapakapa River is used for recreational and food-gathering purposes, and how the proposed water take will impact on river users.

ARC Discharge Permit 34448 to discharge up to 1,900 m³ of wastewater per day from the wastewater treatment pond to the Kaukapakapa River

The Kaukapakapa River is designated as an 'Inland Waters Activity Protection Policy Area' in the RDC Operative Plan, an 'Inland Water Protection Zone Area' in the Proposed District Plan 2000, and a 'Wetland Management Area' in the Proposed Auckland Regional Plan; Air, Land and Water. The proposed discharges into the Kaukapakapa River are not consistent with the objectives, policies and rules contained in the above documents, and will adversely affect the ecological values of the Kaukapakapa River.

The nearby Department of Conservation Scientific Reserve is part of a larger area designated by the ARC as an 'Outstanding Natural Landscape', and by RDC as a 'Significant Natural Area'. The Reserve begins at the fragile estuarine salt marsh along the Kaukapakapa River and any discharges into the river will adversely affect it, particularly those discharges with an increased temperature load.

The Applicant advises that the 100 degree, alkaline, blowdown water from the power station will dominate the temperature of the wastewater detention pond. In their environmental assessment, Golder Kingett Mitchell state that the time between discharging the blowdown water to the pond and discharge into the river is not known, as the timing of the latter is dependant on tidal cycles and will vary each day.

The river temperature has been recorded as high as 26 degrees at the height of Summer, yet temperatures for discharges to the Kaukapakapa River are proposed to range up to 36.9 degrees. KARRA is very concerned about the effects of discharging heated wastewater into the Kaukapakapa River.

KARRA believes that inadequate investigation has been carried out by the Applicant into the tidal and flushing characteristics of the Kaukapakapa River.
The Applicant claims that investigations have been carried out on recreational use and food gathering on the Kaukapakapa River. RDC have confirmed that the recreational survey and questionnaire the Applicant refers to were solely for the purposes of investigating a wastewater project beside the Kumeu/Kaipara River, that no questionnaires were distributed to Kaukapakapa, Helensville or Parakai residents, and that the questionnaire asked for information on resident's use of the Kumeu/Kaipara River – not the Kaukapakapa River. KARRA believes that the Applicant has not properly investigated the extent to which the Kaukapakapa River is used for recreational and food-gathering purposes.

If this consent is granted, KARRA recommends the Applicant be required to install temperature monitoring equipment in the river, upstream and downstream of the power station to ensure compliance with the temperature limits. with the results being made publicly available. Conditions and limits on chemical composition and temperature must be imposed for all wastewater detention pond discharges.

ARC Discharge Permit 34447 to discharge contaminants on or into land from an industrial or trade process from the gas fired combined cycle power station

KARRA is concerned that on site operations may result in contamination of the land, and potentially local waterways. There is some risk involved with industrial and trade processes to be carried out, in particular those relating to refuelling stations; chemical storage areas; and vehicle and equipment washing and maintenance. KARRA believes that any hazardous waste should be removed from the site.

ARC Discharge Permit 34450 to divert and discharge stormwater (up to 5.0m3 per second) from the power station site to the Kaukapakapa River at various locations

KARRA believes that this consent is not consistent with the objectives, policies and rules contained in the Proposed Auckland Regional Plan; Air, Land and Water Plan.

The power station development will result in an impervious area of some considerable size being built. KARRA is concerned that the existing stormwater network will not be able to cope with the increased volume of discharges, and that contaminants will not be removed prior to discharge into the Kaukapakapa River.

If this consent is granted, KARRA would like conditions and limits imposed on the chemical composition and volume of all stormwater discharges. The Applicant should be required to monitor stormwater with the results being made publicly available. Systems and procedures must be put in place by the Applicant to immediately inform river users in the event of a higher than permitted contaminant load being discharged into the river.

ARC Discharge Permit 34687 to discharge contaminants on or into land from an industrial or trade process from the transmission station

KARRA is concerned that on site operations from the transmission station may result in contamination of the land and local waterways. The transformers will contain thousands of litres of oil and KARRA believes there are potential hazards associated with oil storage, processing and refilling of the transformers.

The Applicant has also applied for a consent to divert and discharge stormwater from the transmission substation area to the Kaukapakapa River. KARRA is concerned that contaminants from the transmission station will be flushed into local waterways.

ARC Discharge Permit 34449 to divert and discharge stormwater (up to 0.77m3 per second) from the transmission substation area to the Kaukapakapa River

The transmission substation will be built on a 15,000m² platform, and its transformers will contain thousands of litres of oil.

KARRA is concerned that the existing stormwater network will not be able to cope with the increased volume of discharges from this large impervious area, and potential hazards associated with the oil in the transformers may result in contaminants being discharged into the Kaukapakapa River.

If this consent is granted, KARRA would like conditions and limits imposed on the chemical composition and volume of all stormwater discharges. The Applicant should be required to monitor all stormwater discharges with the results being made publicly available.

Systems and procedures must be put in place by the Applicant to immediately inform river users in the event of a higher than permitted contaminant load being discharged into the river.