



28 June 2013

Ms Sophie Dunstone  
Committee Secretary  
Environment and Communications References Committee  
PO Box 6100  
Parliament House  
**CANBERRA ACT 2600**

Dear Ms Dunstone

**Re: Inquiry into Extreme Weather Events  
Response to Submission 344**

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Thank you for your letter of 24 June 2013 and the opportunity to provide the Committee with a response to the submission made by the Association for Mitigation Studies for Top End Cyclones Inc.

We are unsure of the source of the alleged comments attributed to “the TIO manager” and are not in agreement with these comments. In particular the comment regarding TIO’s cover against cyclone loss is 20 percent reinsured is incorrect.

TIO adopts prudent Industry best practice and an overview of TIO’s structure and reinsurance arrangements are set out below.

TIO is owned by the Northern Territory Government and its Board members are responsible to the Minister for the organisation’s performance.

While ultimately TIO is guaranteed by the NT Government, the company operates on a commercial basis. By Ministerial direction TIO must comply with a prudential standard regime which effectively mirrors Australian Prudential Regulation. TIO’s regulator is the NT Department of Treasury and Finance who review and audit TIO’s processes for compliance.

These standards (GPS 230) include an obligation that TIO have a Reinsurance Management Strategy which is both board and regulator approved.

In determining the scope of our annual reinsurance program the requirements of Prudential Standard GPS 116 are also complied with.

That Standard requires the purchase of vertical reinsurance protection based on a Probable Maximum Loss (PML) which has an annual loss probability of 0.4% (i.e. a 1 in 250 year event). In arriving at our PML comprehensive modelling is utilised, taking into account factors such as:

- historical weather events
- a cyclone event set, i.e. a range of potential cyclones (up to 10,000 variations)
- terrain data
- the specific Location (latitude & longitude) of individual risks
- the type of individual risk, i.e. whether it is a commercial or residential property, a car or a boat
- the individual risk Sums Insured, for buildings, contents, business interruption, etc
- the construction, i.e. concrete, steel, etc., occupancy, height and age of individual risks Insurance policy conditions - deductibles, limits
- all classes of business we underwrite
- our exposures at the time of modelling
- a projection of potential growth in our portfolios
- the building codes
- the impact of escalating prices (demand surge) following a significant event.

The modelling work is undertaken by highly experienced and dedicated experts, engaged as a component of the services delivered by our Reinsurance Advisor. The Advisor is an external reinsurance broking firm, with a global presence, dedicated catastrophe modelling expertise and a worldwide network of consultant experts in multiple fields, including computer modelling and major weather events.

In addition we are able to call on the expertise of global reinsurance companies whom make up our list of Board approved reinsurance counterparties.

As well as the vertical reinsurance protection requirements, GPS 116 also sets out obligations for insurers in relation to catastrophe models and modelling. We are satisfied both that we meet the Standards requirements and that the modelling undertaken is reliable.

From 1 January 2013 GPS 116 has been amended to require vertical protection based on an 0.5% probability (1 in 200 year event), however our program (renewing at 1 July 2013) continues to be placed with a 1 in 250 year event protection.

The weather resilience of buildings in the Darwin region is a key factor in our considerations.

The construction of buildings in the Darwin region is subject to building codes governed by the Northern Territory Building Act, the Building Code of Australia (BCA) and the Northern Territory Deemed to Comply Manual (DTCM).

Properties built within 50km of the coastline of the Northern Territory are designed to resist a Category 4 Cyclone, with expected wind speeds of nominally 252km/hour.

This stringent code was introduced immediately post Cyclone Tracy (1974) and is strongly policed via a building permit system and inspections and certifications during construction.

In consideration of the fact that some of these coded properties are now more than 35 years old, in May 2012 TIO engaged the Cyclone Testing Station (CTS), to conduct a non-invasive survey on 21 houses in Darwin that were built or substantially reconstructed during the period immediately post Cyclone Tracy, from approximately 1975 to 1980.

CTS forms part of the School of Engineering and Physical Sciences, at James Cook University in Townsville, Queensland. They are the pre-eminent, independent authority on the effects of high wind and related damage to low-rise buildings in Australia, South East Asia and the Pacific.

The purpose of the survey was to determine if there was any significant deterioration that would impair the houses resilience to severe storms. The survey investigated the as-built state of houses in relation to supplied drawings from the Northern Territory Department of Lands and Planning, for details such as structural members, connections sizes and spacing. The current condition of building elements were also inspected for age defects, such as decay.

The key findings from the survey were:

- The majority of the houses surveyed appeared to be in an overall sound condition. A few exceptions were noted in relation to the lack of building maintenance of timber battens and bearers, or corrosion of steel components, such as fixings or posts.
- Homeowners had a relatively clear understanding that maintenance and structural improvements would be required on an ongoing basis. Approximately half of the houses surveyed had addressed issues such as corroded roofing by having either new roof cladding installed, painted or elements of the roof replaced.
- The indication from CTS was that the properties reviewed had surprised them in the resilience shown and that any potential perceived deficiencies that were suspected were in fact found to be limited.

These findings give comfort in relation to the continuing resilience of buildings built to code. The catastrophe modelling already allows for age deterioration and the survey findings indicate that older properties will perform better than previously anticipated in a severe weather event.

We also have in place comprehensive planning for business continuity and major event claims management directed both at supporting our customers and also containing claims costs.

In summary, TIO adopts industry best practice and fully complies with the APRA prudential framework. In fact, from the renewal of our reinsurance program effective 1 July 2013, we hold a reinsurance program protecting a 1 in 250 year event, as compared to the APRA standard of a 1 in 200 year event.

We are satisfied that our approach to managing weather exposures is prudent and that we are achieving or exceeding best practice.

Yours sincerely

  
Richard Harding  
Chief Executive  
TIO