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To: Committee, Reps (REPS)
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The design requirements for these residences will obviously set a minimum star rating system regarding their energy efficiency however, I believe a number of additional conditions should be required. These conditions include standards that will ensure Defence families are not burdened with ongoing unnecessary costs and that the building design incorporates some simple features that will allow easy adaption to changing environmental requirements.

Ongoing costs for occupants can be reduced

- by ensuring all appliances, particularly air conditioning units are of the inverter type and with a high star rating because regardless of the environment developed in these houses some occupants will require the benefit of air conditioning.
- all external air conditioning compressors must be shaded
- installation of push button one hour timers to the solar hot water circuit to minimise the possibility of the occupant inadvertently leaving the booster on continuously.
- consideration be given to the location of power points so that the occupants can easily access them to turn off "stand-by power" eg microwave ovens, home entertainment units.
- outside areas suitable to dry clothing to minimise the requirement of using electric cloth driers.
- outside areas for "entertainment" to encourage the use of a barbecue for cooking to get people outside and away from the air conditioned environment

Environmental changes required that should be included in the design include the ability to provide solar panels and rainwater tanks. In these cases simple light coloured gable roof structures should be compulsory. The small fragmented roof panels, inappropriately shaped and often ineffectually orientated to the sun as is common in many of the houses being constructed in Darwin make the installation of solar panels and useful rainwater tanks difficult if not impossible at a reasonable cost.

It is critical in the planning of Muirhead that the maximum number of blocks are orientated such that the residences can be sited to maximise the shading available and minimise their heat gain and hence minimal energy usage with a correctly orientated house.

DHA should be a leader in the Territory with these concepts.

Steve Beagley