

APPENDIX 4.2

Letter of attestation – Energex Un-modelled repex



Advisian Pty Ltd
Level 2, 555 Coronation Drive
Toowong QLD 4066
Australia
PO Box 1051
Toowong QLD 4066

P +61 (0)7 3377 7000
F +61 (0)7 3377 7070
E brisbane@advisian.com
ABN 50 098 008 818
www.advisian.com

26 June 2015

Mr Peter Price
Executive General Manager Asset Management
Energen
GPO Box 1461
Brisbane Qld 4001

LETTER OF ATTESTATION – ENERGEX UN-MODELLED REPEX BUSINESS CASES

Background

On 30 April 2015, the Australian Energy Regulator (AER) released its “Preliminary Decision” in relation to ENERGEX’s 2015/16 to 2019/20 revenue determination. Included in this decision was a significant reduction in the level of approved replacement expenditure (REPEX). In its submission to the AER, Energen had sought \$1,250 million (\$2014/15). The AER decided this allowance should be reduced by 50% to \$622 million over the five year period.

REPEX is divided into two broad categories – “modelled” and “un-modelled”. Modelled REPEX deals with major asset categories and assesses replacement needs largely on the basis of asset age in relation to economic life. Un-modelled REPEX deals with:

“supervisory control and data acquisition (SCADA), network control and protection (collectively referred to hereafter as SCADA); pole top structures; and "Other" in Energen's RIN response”¹.

The AER’s Preliminary decision in relation to these sub categories resulted in reductions in allowable expenditure of up to 86% as shown in Table 1.

Table 1: AER Preliminary Decision – Un-modelled REPEX

Category	ENERGEX Original Proposal	AER Preliminary Decision	Reduction
“Other”	\$281 m	\$39 m	86%
“SCADA”	\$124 m	\$42 m	66%
“Pole Top Structure”	\$80 m	\$69 m	15%

¹ AER Preliminary Decision – Attachment 6 p6-85.



In making these significant adjustments, the AER relied heavily on a review of Energex's proposed REPEX by consultants EMCa. The AER concluded that:

“EMCa found that Energex has not provided convincing justification for the extent to which it proposed to increase repex in the 2015–20 regulatory control period. This is because²:

- *Energex has conducted insufficient project and program analysis to support the timing and volume of activity. Further, its replacement targets appear to coincide with regulatory period end points;*
- *risk assessment has been undertaken at too high a level to assist meaningful decision-making both within and across the program;*
- *aggregate repex modelling prepared by Energex presents alternative outcomes that are so wide as to be of little merit for use in a top-down challenge to validate the proposed expenditure levels; and*
- *there is inadequate justification of the significant proposed step increases in expenditure.”*

Following the publication of the Preliminary Decision, Energex engaged Advisian to review and provide feedback to Energex on “business cases” pertaining to specific programs in the “SCADA” and “Other” categories. The intent of these business cases is to address some or all of the issues identified by EMCa. Advisian was not asked to review the “Pole Top Structures” category.

Advisian's Credentials in relation to the Matter

Advisian (formerly Evans & Peck), a wholly owned subsidiary of WorleyParsons, is a specialist consultancy experienced in infrastructure delivery, operation and risk management. The lead consultant, William Glyde, has over 43 years' experience in the power sector and has conducted independent reviews on electricity transmission and distribution utilities both within Australia and overseas. William has direct engineering experience in substation and mains fault investigation, and protection design.

Review of Process – Following initial discussions with engineering staff within Energex with responsibilities in areas of technical specialisation such as SCADA, telecommunications, protection and primary plant, Advisian reviewed and provided feedback on a series of “draft” business cases. Our primary focus was on:

- Clear identification of the **specific** issue under consideration, and the identification of a work plan dealing with specific sites and equipment types, rather than generic program to deal with generic issues.
- Credibility of the issues identified in terms of the reviewer's own industry experience, the technical arguments presented and the solutions proposed.

² EMCa review of Energex's Augex and Repex Regulatory Proposal p.87.



- Correlation between the specific issue under consideration and the risk assessments conducted in relation to the issue at hand. Consistent with EMCA’s view, our initial view that the risk assessments conducted in Energex’s initial submission were at too high a level to be of relevance to the specific program being proposed.
- The identification of a range of clear options, both in regards to how the identified issue could be treated and the timing of the treatment, particularly in relation to the acceptance of a greater level of risk than that envisaged in Energex’s original submission.
- Consideration and elimination of overlaps, both between programs and with other REPEX or AUGEX programs.
- From a Governance perspective, consistency with broad organisational strategies. This applies particularly to programs such as the implementation of fibre networks and other technological advances.
- Evidence of an “executive” review process following initial drafting, including evidence of program elimination or reduction.

In total, Advisian reviewed 21 business cases. Following executive review, two programs were dropped completely. The final portfolio of 19 programs is summarised in Table 2.

Table 2: Summary of Un-modelled REPEX Business Cases Reviewed by Advisian

	Category	Program	\$m, 2014-15 (exc. overheads)
1	Other	Reactive asset replacement program	25.0
2	Other	Obsolete protection scheme replacement program	24.0
3	Other	Replace distribution aging cable terminations program	17.9
4	Other	C&I circuit breaker remote control program	7.2
5	Other	Instrument transformer replacement program	2.0
6	Other	Planned battery replacement program	1.7
7	Other	Air break switch replacement program	1.4
8	Other	Commercial SCADA RTU program	9.4
9	Other	SCADA feature implementation program	4.6
10	Other	SCADA software continuous improvement program	1.5
11	Other	OT Environment – Establishments and migrations	4.0



	Category	Program	\$m, 2014-15 (exc. overheads)
12	Other	OT Environment - Refurbishment	1.4
13	SCADA	Protection relay replacement program	15.0
14	SCADA	Core IP-MPLS Telecommunications network (Matrix)	13.6
15	SCADA	Optical fibre cable infill	11.5
16	SCADA	Pilot cable replacement program	10.5
17	SCADA	Obsolete telecommunications equipment	6.5
18	SCADA	RTU replacement program	4.0
19	SCADA	Obsolete SCADA equipment	1.0

Following the establishment of the business cases pertaining to these programs, and the process outlined above, Energex has proposed revised un-modelled REPEX in the “Other” and “SCADA” categories significantly below those envisaged in the original submission to the AER, but above the levels contained in the AER’s preliminary decision. This is summarised in Table 3.

Table 3: Revised Un-modelled REPEX arising from Business Case Development

Category	ENERGEX Original Proposal	AER Preliminary Decision	ENERGEX Revised Proposal	Reuction from Original Submission
“Other”	\$281 m	\$39 m	\$100.1 m	64%
“SCADA”	\$124 m	\$42 m	\$62.1 m	50%

Advisian’s Conclusion

On the basis of evidence presented in Energex’s original submission in support of its un-modelled REPEX, Advisian concurs with the view of the AER and its consultant EMCa that insufficient information was provided to justify the levels of expenditure proposed by Energex. Given the lack of information provided by Energex, the AER’s conclusion that expenditure levels should be largely constrained to historic levels should be interpreted in this context. However, this in itself is not necessarily the “right” level of expenditure.



In Advisian's view, the development of the 19 business cases relating to un-modelled "Other" and "SCADA" REPEX, whilst representing an increase on the levels proposed in the AER's Preliminary Decision, present a more credible indicator of the "right sizing" of the program. They still represent a significant reduction on the original proposal (in the range 50 – 64%), but have a sound basis developed on:

- Specific projects to address specific problems
- Relevant risk assessments, combined with an acceptance of a materially greater level of risk
- A combination of bottom up development with both top down and independent review.

To this end, Advisian is therefore of the view that the revised level of proposed expenditure has been developed using a robust methodology, and provides a reasonable balance of risk and cost for these categories of expenditure for the 2015/16 – 2019/20 regulatory period.

Yours sincerely

William Glyde
Specialist Advisor