

Response to Consultation Questions

ENERGY SECURITY BOARD INTEROPERABILITY POLICY

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Table of Contents

1. Introduction	2
2. Response to Consultation questions	3

1. Introduction

Applied Systems Engineering Inc., a Kalkitech Company, has been in data communication business for more than 40 years, serving utilities worldwide with over four global offices and 200+ employees exclusively focused on utility protocol communications. Most US utilities are ASE's customers for various protocol products. ASE is an active player in the IEEE 2030.5, SunSpec Modbus, DNP3, and IEC 61850 protocols ecosystem with its products, services, and secure solutions.

ASE/Kalkitech has delivered IEEE2030.5 based DER Gateway, Aggregator software, and Server components to Utilities like PG&E, WEL Networks NZ. ASE is an approved vendor for Low-Cost Telemetry in CA under Rule 21 for PG&E. Currently in active discussion for a Pilot with SCE as well as our gateway has been selected by systems integrator for a BESS pilot in PowerCor/United Energy in VIC Australia and we are working with partners for 2030.5 server integration certification for flexible export at SAPN Australia.

ASE/Kalkitech supports adoption of IEEE2030.5 standard for DER/CER integration and is keen to offer our consulting support to Energy Security Board (ESB) initiatives on adoption of CSIP-Aus nationally. We are keen to participate in any workshops ESB intends to hold on the subject in the future.

ASE/Kalkitech response to few consultation questions is given below.

2. Response to Consultation questions

9. Would there be value in agreeing a national approach to public key infrastructure for consumer energy resources?

Yes. There is significant value to agreeing to a national approach to PKI for consumer energy resources. This will enable the echo system to build and support this approach better without business risks. However, this approach should involve private PKI providers who are incentivized to participate in this program, and if required incentivized to support the program.

10. Are there existing examples that could be used as a model for the consumer energy resources ecosystem?

We are aware of limited, device specific approaches. However, they all are linked to a specific certification organization and specific standards. The downside of this approach is the lack of a competitive landscape for PKI certificate providers and incentive for the broader market to invest in this till the volumes scale and volumes wont scale, until the PKI becomes broad-based.

11. What are the pros and cons of establishing a national certificate authority?

Ideally the PKI infrastructure is better handled by 3rd party providers. This brings cost down and more competition and support. A national approach to PKI is good, but if this is a centralized single PKI authority that issues Certificates, manages servers etc., there is a high chance that as time passes, and the industry evolves, how fast this authority can keep pace.

An ideal way forward would be to define a national approach, but invite current PKI providers (with incentives if needed) to support this national approach.

12. Do stakeholders have a view as to who should perform the role of national certificate authority, if it were created?

Ideally this is better handled by a private entity or multiple private entities rather than a Utility or Standards Body or Govt driven approach.

13. What views do stakeholders have about the adaptability of existing industry-led product certification and compliance processes for future use?

The existing Industry-led product certification and compliance is the best way forward, if we can incentivize them to participate in this national framework, so that the technological and other advances will become part of this effort as well, and we do not end up having diverging roadmaps 5 – 10 years from now.