RETAIL ENERGY CODE

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STATUS	FOR DISCUSSION

FOR DISCUSSION: R0096 - CSS MESSAGE REGENERATION FUNCTIONALITY

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1 PURPOSE

The purpose of this paper is to invite comment from REC CIG members on the proposed implementation approach for R0096 - *CSS Message Regeneration Functionality*. Following a detailed impact assessment on the proposed soliton, the DCC have requested a novel approach to solution design for CSS Systems. RECCo have requested that the Code Manager fields opinion on the DCC's approach to provide confidence.

2 CHANGE OVERVIEW

Since CSS Go-Live there have been incidents where CSS has failed to generate messages and therefore are not delivered to the intended recipient. This results in a failure of the switching process and can cause significant complications for the intended recipient, who is required to manually intervene to re-synchronise messages.

CSS does not currently have the ability to generate messages that were not originally created, such that it is currently unable to perform message synchronisation by re-generating messages.

Change Proposal R0096 has been raised to explore the introduction of new functionality which will allow CSS to identify and re-generate messages which have failed initial generation. For the avoidance of doubt, this Change Proposal does not include any fixes to known incidents that result in messages failing to generate but looks to introduce functionality that will address incidents as they occur for the enduring CSS operations.

3 SOLUTION OVERVIEW

The Technical Design Authority (TDA), CSS Provider, Gas Retail Data Agent (GRDA) and Electricity Retail Data Agent (ERDA) initially discussed and baselined the requirements for R0096, as part of a Technical Change Workshop. The workshop outputs focused on requirements definition and remained relatively solution agnostic ahead of the Preliminary Impact Assessment (PIA).

However, during the development of this Change Proposal, the CSS incurred a P1 Incident (INC0216074) resulting in secured active and inactive messages relating to consumer switching not being issued out to Market Participants and other parties such as Central Services.

As a result of this incident, the TDA issued a second PIA to capture additional requirements which were identified following the resolution of this incident. However, following the completion of the second PIA, there was still some concern as to whether sufficient time had been provided to fully understand and incorporate the findings from the P1 incident. As such, the Change Proposal was put on hold to allow the CSS Service Provider to fully assess the P1 incident and provide an updated approach with regards to a solution.

The updated approach for a solution has now been provided by the CSS Service Provider which considered the following points

- Exploring the introduction of message regeneration to minimise the downstream impact of message notification failures in the CSS.
- Recognising the importance of re-triggering workflow operations that have encountered challenges, such as those stemming from a BCDR (Business Continuity and Disaster Recovery) incident or any other disruptive event that could potentially hinder the delivery of notifications to recipients.
- Regenerate notifications - CSS must be capable of identifying workflows that have not reached the desired state and instigate automated recovery with manual intervention as a last resort.

An overview of the workflow for the updated solution approach is provided below and was also shared during a Technical Change Workshop. The solution consists around the following additions:

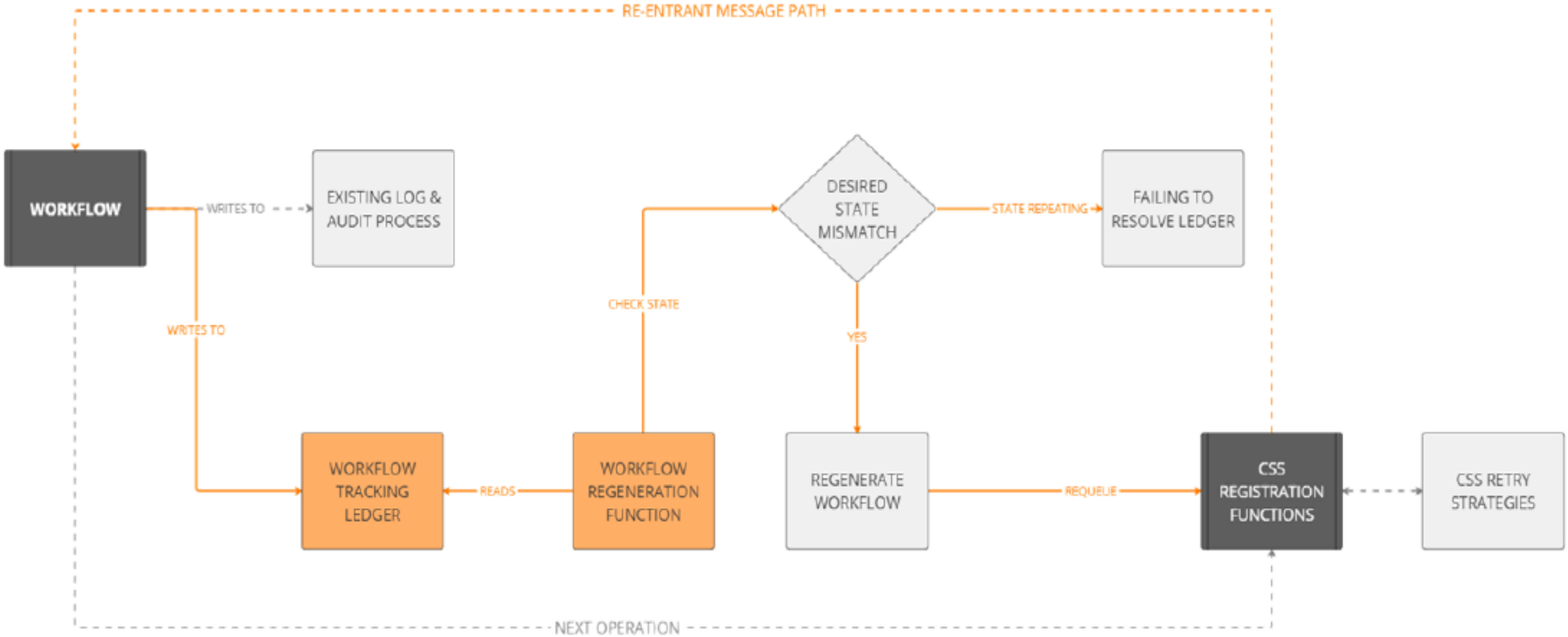
- Workflow Tracking Ledger – Will provide information of the current workflow state
- Workflow Regeneration Function – Will compare the current workflow state against the desired workflow state

If there is a mismatch between the ‘current’ and ‘desired’ workflow state, this will initiate the ‘Regenerate Workflow’ as a means of the system attempting to ‘self-heal’.

In addition to this, a ‘Failing to Resolve Ledger’ has also been incorporated into the solution and the aim of this is to provide live insight into the Workflow Ledger. This information will be provided through a live dashboard and therefore provide early notification to the Service & Operations teams of potential and realised failures. The simplified workflow for the proposal is illustrated in the image below:

RETAIL ENERGY CODE

Simplified Operation Tracking Flow



4 DCC NOVEL DESIGN APPROACH

The DCC have indicated that, in order to fully understand the implications of the proposed solution on their systems, they will need to front-end design phase operations that would normally be part of implementation activities. This approach has been used before successfully for R0080, where the DCC used RECCo funding to complete solution design activities in advance of the Change being formally approved at the responsible committee.

At the time, Parties reported that this approach was beneficial as it allowed them to understand the impact of the DCC changes on their systems much more thoroughly. However, the risks associated with this approach are that, should the Change fail to be approved, the DCC will have used funding assigned contingent on the Change being approved.

In order to provide additional confidence to their decision on how to proceed, RECCo have asked the REC Code Manager to engage with industry to understand how Parties would respond to this novel design phase approach.

5 ACTIONS

Change Issues Group Members are invited to:

- **NOTE** the contents of this paper
- **DISCUSS** whether the DCC's novel approach to the solution design phase is appropriate, and to provide any other relevant feedback.