synergy

Our Reference: #DMS3174521 – DIS-0004-05
Enquiries: Simon Adams
Telephone: 6212 1076

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Mr Rob Pullella
Executive Director
Network Access
Economic Regulation Authority
Level 6, Governor Stirling Building
197 St Georges Terrace
PERTH WA 6000

Dear Mr Pullella

Western Power's Proposed Revised Access Arrangement - Submissions on Standard Access Contract

Synergy makes the following submissions on the electricity transfer access contract (**ETAC**) submitted by Western Power as part of its proposed revised access arrangement (**PRAA**). Western Power has submitted the ETAC as meeting the requirements of a *standard access contract* under the *Electricity Networks Access Code* (**ENAC**).

Unless otherwise specified in this submission words in italics have the same meaning as in the ENAC and words commencing with capitals have the same meaning as in the ETAC.

1 Summary:

Under section 5.1(b) of the ENAC Western Power must, in its PRAA, include a *standard access contract* in accordance with sections 5.3 to 5.5 for each *reference service* in the PRAA. Western Power has proposed the ETAC in the PRAA as meeting the requirements of a *standard access contract.*

Section 5.3 of the ENAC requires the ETAC to be:

"(a) reasonable; and
(b) sufficiently detailed and complete to:
  (i) form the basis of a commercially workable *access contract*; and
  (ii) enable a *user* or *applicant* to determine the value represented by the *reference service* at the *reference tariff*."

T: (08) 9212 2222 F: (08) 9221 4828 W: synergynet.au E: info@synergynet.au
228 Adelaide Terrace, Perth WA 6000. GPO Box K851, Perth WA 6842. ABN: 71743446639

Synergy submits that, for the reasons set out in this submission, the ETAC is not reasonable within section 5.3(a) of the ENAC, nor is it sufficiently detailed or complete to form the basis of a commercially workable *access contract* within section 5.3(b)(i) of the ENAC. Further Synergy submits that the ETAC does not meet 5.3(b)(ii) of the ENAC because, in many respects the ETAC is not sufficiently detailed or complete to enable a *User* to determine the value represented by the *reference service* at the *reference tariff*.

Synergy requests that the Economic Regulation Authority (**Authority**) not approve the PRAA and request Western Power to amend the ETAC along the lines set out in this submission.

2. Requirements of the Electricity Network Access Code

Section 5.4 of the ENAC relevantly provides that the ETAC may:

> "be based in whole or in part on the *model standard access contract*, in which case, to the extent that it is based on the *model standard access contract*, any other matter which in the *model standard access contract* is left to be completed in the *access arrangement*, must be completed in the manner consistent with:
> (i) any instructions in relation to the matter contained in the *model standard access contract*;
> (ii) section 5.3; and
> (iii) the *Code objective*."

Alternatively, under section 5.4(b) of the ENAC, the ETAC may:

> "be formulated without any reference to the *model standard access contract* and is not required to reproduce, in whole or in part the *model standard access contract*."

The *Code objective* is defined in section 2.1 of the ENAC as follows:

> "To promote the economically efficient:
> (a) investment in; and
> (b) operation of and use of *networks* and *services* of *networks* in Western Australia in order to promote competition in markets upstream and downstream of the *networks*".

Under section 5.5 of the ENAC the Authority must determine wether the ETAC is consistent with section 5.3 and the *Code objective* to the extent that the ETAC reproduces, without material omissions or variations, the *model standard access contract*. Further, under section 5.5(b) of the ENAC, the Authority otherwise must have regard to the *model standard access contract* in determining whether the ETAC is consistent with section 5.3 and the *Code objective*.

It is not immediately apparent to Synergy whether Western Power has, in accordance with section 5.4(b) of the ENAC, formulated the ETAC without any reference to the *model standard access contract* or whether, in accordance with section 5.4(a) of the ENAC, Western Power has based the ETAC in whole or in part on the *model standard access contract*. Synergy submits that it is important for

Western Power to advise all relevant parties which of sections 5.4(a) or 5.4(b) applies, otherwise it is very difficult for parties to make submissions on the extent to which the ETAC complies with the ENAC. Further, Synergy submits that it will be very difficult for the Authority to perform the task required of it under section 5.5 of the ENAC.

To the extent that it has been able, Synergy has sought to form a view on whether Western Power intended that parts of the ETAC be based upon the *model standard access contract* and has made submissions accordingly. However, Synergy requests that the Authority require Western Power to advise which, if any, parts of the ETAC are based upon the *model standard access contract;* alternatively whether the ETAC was formulated without any reference to the *model standard access contract.* Once Western Power has done this affected parties such as Synergy will be in a better position to make further submissions on whether the ETAC complies with the requirements of the ENAC.

Synergy submits that for the reasons set out below the ETAC, having regard to the *model standard access contract,* is not consistent with section 5.3 or the *Code objective.*

3. Provision and use of services –ETAC clause 3.1

a. ETAC clause 3.1(b) – embedded generators

Clause 3.1(b) of the ETAC effectively provides that, in order for a User to transfer electricity out of the Network, it must have an Exit Service. Further, in order for a User to transfer electricity into the Network, it must have an Entry Service. However, it is not clear to Synergy whether, and if so how, this provision will work for small embedded generators, such as photovoltaics. In particular it is not clear how this provision will cater for the WA Government's Renewable Energy Buyback Scheme (**REBS**).

In this respect Synergy understands that for generators who have only one *connection point* at which they have an Exit Service, the use of the electricity needed to run the generator's plant and equipment is taken into account in the settlement procedure under the Wholesale Market Rules. There is therefore no need to have a Reference Service for this type of *connection point* to cater for the fact that electricity is both transported out of and into the Network at the same *connection point.*

However the same is not the case for embedded generation, particularly small photovoltaic generators such as households, where the settlement of electricity transported into the Network and exported from the Network does not appear to be contemplated under the existing regulatory regime. Further, there is no Reference Service in the ETAC providing for this to occur at a single *connection point.* In fact the ETAC currently prohibits such a *service.*

Synergy submits that the ETAC should at least contemplate the existence of a *connection point* at which electricity is exported into and out of the Network, as is currently happening for, e.g., small scale renewable energy systems, which fall under REBS. ETAC should, as a minimum, be amended so that it does not have the effect of preventing Western Power complying with section 5.2 of the ENAC and providing a *reference service* for customers seeking to come under the REBS. Synergy submits

that such an event falls within section 5.2(b)(i) of the ENAC. Synergy will, in a separate letter to the Authority on *references services*, make further submissions on the *reference service* Synergy submits should be provided as part of the PRAA to cater for the REBS. Synergy asks the Authority to also refer these submissions when considering the ETAC, once Synergy has made them.

b. ETAC clause 3.1(c) – cap on Contracted Capacity

Clause 3.1(c) of the ETAC places a requirement on a User to take action to seek to cap the rate at which electricity is transferred into or out of the Network, irrespective of whether it is the User or someone else on behalf of a User that is taking the electricity out of the Network or exporting the electricity into the Network. The clause relevantly provides that:

> a "User* must endeavour, as a Reasonable and Prudent Person*, to ensure that the [electricity transfer rate] does not exceed the Contracted Capacity* for [the] Service*."

Synergy submits that this clause should be amended to address the following issues so that the clause is reasonable within section 5.3(a) of the ENAC and to ensure that the *Code objective* is met.

The ETAC must be entered into by, among others, retail Users who use the Reference Services provided by Western Power under the ETAC to supply electricity to the retail Users' customers. However the regulatory regime and the PRAA (including the Reference Services in the ETAC) do not readily enable a retail User to control the flow of electricity to its customers. Therefore clause 3.1(c) contemplates that a retail User should take some action to control the rate at which its customers consume electricity.

However, it is not clear precisely what action a retail User must take in order to comply with clause 3.1(c). For example, is it sufficient for a User to include a condition in its customer contract to the effect that the customer must not exceed Contracted Capacity? Further, if the customer breaches the condition is the User obliged to enforce the condition, even if to do so is commercially detrimental to the User and the enforcement action is primarily, if not solely, for the benefit of Western Power?

The wording of the definition of Reasonable and Prudent Person appears to indicate that a User would be required to do this, which Synergy submits is not reasonable contrary to section 5.3(a) of the ENAC. Further, that such a result does not promote the economically efficient operation and use of *networks* and *services* of *networks* in order to promote competition in markets downstream of the *network*.

Synergy submits that it is not reasonable and is contrary to the *Code objective* for a regulated contract such as the ETAC to require one contracting party (ie the User) to take action, at its cost, for the benefit of the other contracting party (ie Western Power) against third parties (ie the User's customers), particularly in circumstances where Western Power has other avenues open to it to protect its interests (see further below). Further, unlike Western Power, a retail User does not have the ability to monitor in a timely manner whether its customer is in breach of the contractual

requirement, let alone whether such breach is causing damage, for example to the Network.

In this respect it appears any damage caused by a customer exceeding Contracted Capacity is most likely to be suffered by Western Power and not by the retail User. Synergy submits that it will be legally difficult for a User to enforce such a contractual requirement, eg by way of an injunction or damages. In substance all the ETAC is seeking to do is to have the retail User pass on to its customers any damages the retail User must pay Western Power under the ETAC. Synergy submits that such a result does not promote the economically efficient use of *services* of *networks* in order to promote competition in markets downstream of the *network* and thus does not meet the *Code objective*, particularly in circumstances where it will be legally problematic for the User to successfully recover from the User's customer the full amount of any damage suffered by Western Power.
For the reasons set out above Synergy submits that clause 3.1(c) should not extend to circumstances where a User does not directly transfer electricity into or out of the Network.

Alternatively, Synergy submits that if it is intended that clause 3.1(c) requires only that a User include a clause in its customer contract to the effect that the customer must not exceed Contracted Capacity, then clause 3.1(c) should be amended to make this express. Further, clause 3.1(c) should also provide that the User does not have to enforce this requirement of the customer contract. Instead, it should be express in the ETAC that the customer contract should provide an acknowledgment from the customer that the Contracted Capacity limitation is for the benefit of Western Power and Western Power can, if it chooses, enforce the clause; alternatively, that the User can elect to assign all its rights under the customer contract in relation to Contracted Capacity to Western Power in the event Western Power wants the retail User to enforce the Contracted Capacity restriction in the User's customer contract but the User does not.

Synergy submits that, for the reasons set out below, clause 3.1(c) is also uncertain in its operation as to precisely what the electricity transfer rate is that a User must not exceed. Therefore clause 3.1(c) is not sufficiently detailed and complete to form the basis of a commercially workable *access contract* contrary to section 5.3(b) of the ETAC.

Not all of the Reference Services specify a maximum rate that electricity is permitted to be transferred into or out of the Network. In fact some of the Reference Services (for example metered demand) allow demand (and thus the transfer rate) to be exceeded. These Reference Services entitle Western Power to charge a proportionately higher amount when the maximum demand is exceeded. Synergy submits that clause 3.1(c) of the ETAC is prima facie inconsistent with such a Reference Service.

The dictionary of the ETAC set out in schedule 1 relevantly defines Contracted Capacity as "the maximum rate at which the User is permitted to transfer electricity into or out of the Network" by reference to various criteria. None of these criteria appear to cater for the Reference Services that permit the electricity transfer rate to exceed the maximum rate specified as part of the Service.

There may be an argument that paragraph (b) of the criteria should be interpreted as permitting a User to exceed the maximum electricity transfer rate specified under the relevant Reference Service but to not exceed the maximum permitted electricity transfer rate under the Technical Rules. However such an interpretation would introduce very complicated issues, including the interrelationship between the ETAC and the Technical Rules. For example, what happens if Western Power has granted a User's customer a derogation from the Technical Rules but such derogation does not apply to the User.

Synergy submits that clause 3.1(c) also unreasonably restricts, on an arbitrary basis, competition in the *services* that may be provided by a retail User to its customers. Western Power, under the Technical Rules, and under its Connection Contracts with the ultimate end user, and under the *Energy Operators (Powers) Act 1979* ("**EOP Act**"), has the ability to control the actions of a retail User's customer in minute detail and to impose sanctions for non compliance. For example, section 58(2)(c) of the EOP Act permits Western Power to stop supplying electricity in a very wide range of circumstances, including where a retail User's customer's installation or apparatus or manner of using energy does not comply with any requirement previously made known by Western Power. Further, under section 58(3) of the EOP Act, Western Power can enter into an agreement with such a customer requiring it to comply with such terms and conditions as Western Power thinks fit. Finally Western Power also may, and does, install circuit breakers to limit a User's customer's ability to transfer electricity into and out of the Network.

Synergy submits that there appears to be little need for Western Power to impose, via clause 3.1(c) of the ETAC, yet another layer of compliance, this time on a retail User. If this were permitted, the result would be that Western Power is able to transfer:

- a risk that it can currently adequately manage in other ways; and
- the cost of managing and mitigating that risk,

to a third party (ie the User) who has far less ability to manage and mitigate the risk than Western Power. Further, the third party (ie User) obtains no tangible benefit in return for taking on both the risk and the cost of managing and mitigating the risk. Synergy submits that the effect of the clause is to enable Western Power to widen its ability to recover any loss arising from a third party damaging the Network to not only that third party but also the retail User.

In these circumstances Synergy submits that it is not reasonable with section 5.3(c) of the ENAC and is also contrary to the *Code objective* to seek to impose an unspecified obligation on a retail User to take positive actions to limit the manner in which its customers use electricity when Western Power already has in place mechanisms that permit it to do this. Further Western Power can do so far more effectively than a retail User.

Finally, clause 3.1(c) also restricts a retail User's ability to enter into contracts with its customers which entitle the customer to increase its contracted maximum demand (including changing, if necessary, the Reference Service applicable to the customer). Synergy submits that it is not reasonable for the ETAC to interfere with a retail User's ability to contract to provide services to its customers and that a retail User and its customer should be free to enter into a contract under which maximum demand is varied, subject only to Western Power's technical requirements and any

additional charges that are reasonably required under the applicable Reference Service.

4. User may select Services – ETAC clause 3.2

Clause 3.2 of the ETAC refers to Western Power processing a notice by a User to change a Service in respect of a Connection Point in accordance with the Applications and Queuing Policy ("**AQP**"). However the timing in clauses 13.1(a) and 13.1(b) of the AQP within which Western Power must process the notice appear to be inconsistent with the requirement to nominate a transfer date set out in clause 4.7 of the *Customer Transfer Code*. Synergy submits that clause 3.2(b) should be amended to require Western Power to process a notice from User (ie a customer transfer request) in accordance with the requirements of the *Customer Transfer Code*.

5. Deletion of a connection point – ETAC clause 3.6

Synergy submits that clause 3.6 of the ETAC does not make it sufficiently clear that Western Power must not delete a Connection Point other than in accordance with a request by a User under clause 3.6(b). Further, that the sanctions for Western Power deleting a Connection Point from the ETAC in breach of clause 3.6 are not sufficient.

Synergy is aware that Western Power has, on occasion, deleted Connection Points from an *access contract* other than at the request of a User in accordance with clause 3.6(b). The impact of this upon a User can be significant, including the lost opportunity cost to profit from the sale of electricity to the User's customers. Under the definition of Direct Damage in Schedule 9 of the ETAC, a User could not seek such lost opportunity costs from Western Power if it deleted a Connection Point in breach of the ETAC.

Synergy submits that in order for clause 3.6 to be reasonable within section 5.3(c) of the ENAC, the following should be added to clause 3.6:

> "(d) Subject to the Customer Transfer Code, Western Power must not delete a Connection Point other than in accordance with a notice given by a User in accordance with this clause 3.6.
>
> (e) If Western Power deletes a Connection Point in breach of clause 3.6(d), Western Power is liable to pay the User any Indirect Damage suffered by the User as a result of Western Power's breach."

6. Amendment to schedule 3 – ETAC clause 3.7

Clause 3.7(b) requires that Western Power provide a User with secure access to the updated information in the Metering Database. However there is no detail in the ETAC around how Western Power will provide a User with such secure access or the timeframe within which Western Power must do this.

Synergy submits that to comply with section 5.3 of the ENAC, clause 3.7 of the ETAC should be specific as to the manner, method and timing by which Western Power provides a User with such access, particularly given the dearth of any other

regulatory requirements on Western Power in this respect. Therefore Synergy suggests that clause 3.7 be amended as marked up as follows:

> "(b) If the User* is a Metering Code Participant* then the User* and Western Power* agree that Western Power* will, in accordance with the provisions of the Metering Code*, record and update in the Metering Database* the information in part 1 of schedule 3, and will do all things reasonably necessary to provide the User* with secure access to this information...
>
> ...
>
> (f) Western Power*, acting in accordance with Good Electricity Industry Practice*, will provide the User* with such access as is reasonably acceptable to the User*, acting as a Reasonable and Prudent Person*, to the Metering Database* to enable the User* to update the information contained in the Metering Database* in accordance with the Metering Code* and clause 3.7(a), including access via "BuildPack", as that term is defined in the Communication Rules made under the Metering Code*."

Synergy also submits that it is not clear how a User can comply with clause 3.7(e)(ii) and update Schedule 3, particularly as clause 3.7(b) appears to contemplate that only Western Power can actually update Schedule 3. This should be clarified in the ETAC.

Finally, Synergy submits that clause 3.7(b), (c), (d), (e) and clause 7.1(f) will create difficulties for Users, particularly Synergy, determining and reconciling the Charges levied by Western Power. Synergy submits that these clauses do not adequately deal with the interaction between the Metering Database and Schedule 3 or with what happens when there are discrepancies between the two, which could arise due to differing requirements to update Schedule 3 and the Metering Database.

Synergy understands that the Metering Database is the database referred to in section 4.1 of the Metering Code.

Synergy submits that accurate and regularly updated "*standing data*" and "*energy data*" in the Metering Database is essential to a commercially workable ETAC in accordance with section 5.3(b) of the ENAC. Unless this information in the Metering Database is up to date then it is difficult, if not impossible, for any use of the Network to be efficient, for Western Power to correctly calculate Charges, for Users to effectively determine and reconcile the Charges and for a retail User to ensure that its customer's use of a Connection Point meets the Eligibility Criteria.

Synergy submits that clauses 3.7 and 7.1 of the ETAC are ambiguous and do not clearly define the relationship between the Metering Database and Schedule 3 nor how a change of Service under the AQP or a Permanent Reconfiguration (or other Network change) results in the attributes within the Metering Database, Schedule 3 and the Price List being updated.

Synergy further submits that such ambiguity results in the ETAC not meeting the *Code objectives* nor complying with section 5.3(b) of the ENAC. The ambiguity will lead to discrepancies between Schedule 3 and the Metering Database, resulting in

Western Power and Users having difficulty tracking and monitoring Connection Point attributes and use of the Network, and thus the proper Charges under the ETAC. This will lead to an inability for Western Power and the User to accurately calculate the Charges in accordance with the determinates in the Pricing List, particularly when a retail User has large numbers of Connection Points.

Synergy submits that the ETAC should be amended to address the following issues:

- The information contained in Schedule 3 must always be correct and aligned to the Metering Database. If there is a discrepancy between the Metering Database and Schedule 3 (or any other registry) then, in the absence of manifest error, the Metering Database must be deemed to be correct in accordance with section 4.4(2) of the Metering Code and both the User and Western Power should be entitled to rely upon the information in the Metering Database in performing their respective obligations under the ETAC.

- Where a Permanent Reconfiguration of the Network occurs as a result of a notice or application by the User, then the Metering Database must be updated in accordance with the requirements of the Metering Code, and this must be reflected in the ETAC, including in an immediate updating of Schedule 3.

- The note in Schedule 3 should be changed to reflect that Western Power will store the details in the Metering Database as described in accordance with clause 3.7 (as amended to address the issues identified in this submission).

- There should be a clear mechanism in the ETAC detailing how Western Power will update Schedule 3 from the Metering Database and how Western Power will advise affected Users of such updates. The requirement in clause 3.7(e) for each party to independently update their own Schedule 3 appears to be unworkable and will lead to manifest errors as between a User and Western Power and also the Metering Database.

- The Charges should be calculated using the Reference Service attributes listed in Schedule 3 (e.g. CMD and DSOC) while the Network determinates (e.g. substation zone, substations distance, TNI and pricing zone) should be those detailed in the Price List, as approved by the Authority annually. Synergy understands that this is perhaps what Western Power intended by clause 3.7. However Synergy is not convinced that clause 3.7 actually achieves this result.

7. Contracted Capacity not utilised – ETAC clause 3.8

Clause 3.8 of the ETAC permits Western Power to give a notice to a User setting out Western Power's intention to reduce the User's Contracted Capacity by an amount at a specific time, where Western Power forms the opinion, as a Reasonable and Prudent Person, that it is unlikely that any unused Contracted Capacity will be used by a User to satisfy the User's actual forecast requirements.

Further, under clause 3.8(b) the User, upon receipt of such a notice, has an obligation to either use the unused Contracted Capacity or demonstrate to the satisfaction of Western Power, acting as a Reasonable and Prudent Person, that the unused Contracted Capacity will be used to satisfy the User's actual forecast

requirements. If the User does not do this then Western Power may unilaterally reduce the User's Contracted Capacity.

Synergy submits that this clause should be deleted as being contrary to sections 5.1(b) and 5.3 of the ENAC and the *Code objective*.

Under section 5.1(b) of the ENAC an *access arrangement* must include a *standard access contract* for each *reference service*. Synergy submits that it is implicit in this section that the *standard access contract* contain only those terms and conditions that relate to and are reasonably necessary to govern the *reference service*. However, clause 3.8 of the ETAC does not relate to or govern a *reference service*. Rather, the clause specifically contemplates overriding entitlements to a *reference service* for matters unrelated to that service. The effect of the clause is to give Western Power the ability to unilaterally amend existing contractual entitlements for the apparent purpose of enabling Western Power to determine the best use of the Network.

Synergy submits that the Authority should not permit Western Power to expand the scope of the regulated *standard access contract* beyond that which was reasonably contemplated by the ENAC. Synergy submits that clause 3.8 deals with matters beyond those that are reasonably contemplated by the ENAC. Synergy submits the ENAC did not contemplate that the regulated *standard access contract* would include matters that were contrary to the *reference service*, being the *service* in respect of which the regulated contract is to provide terms and conditions.

Further, Synergy submits that clause 3.8 goes beyond what is reasonably required in order to provide terms and conditions upon which Western Power will provide *reference services*. Rather, the clause goes towards Western Power's management of the *network*, which Synergy submits is not appropriate in a regulated *standard access contract*.

Synergy also questions whether there is any statutory basis for Western Power to be given the ability to form a view as to whether a User's actual or forecast Contracted Capacity requirements are reasonable. To give Western Power such an ability would be, in effect, to permit Western Power to control the manner in which business is expanded and conducted in the SWIN. Synergy submits that the head of power under which the ENAC was made, namely section Part 8 of the *Electricity Industry Act 2004*, does not extend to granting the power to give this ability to Western Power under the regulated *standard access contract*.

Finally, Synergy submits it is not reasonable within section 5.3(a) of the ENAC for Western Power to have the ability to unilaterally reduce a User's Contracted Capacity.

8 Controllers – ETAC clause 6

a. ETAC clause 6.1(c) – nomination of Controller

Synergy submits that, for the reasons set out below, it is not reasonable within section 5.3(a) of the ENAC for clause 6.1(a) of the ETAC to require a User who is not the Controller of a Connection Point to nominate a person as the Controller of a Connection Point before the Start Date of the relevant Service.

Synergy is aware that Western Power has allocated to retail Users such as Synergy Connection Points without prior notice to the User. Further Western Power has retrospectively allocated Connection Points to retail Users such as Synergy. Therefore Synergy submits that clause 6.1(a) should be amended as underlined as follows:

> "If the User* is the not the Controller* of a Connection Point* then the User* must, by notice to Western Power* before the Start Date* of the relevant Services* or as soon as reasonably practical thereafter, nominate a person as the Controller* for the Connection Point* where..."

b. ETAC clause 6.1(e) – nomination of Controller

Clause 6.1(e) of the ETAC places an absolute obligation on a User to procure the nominated Controller to enter into a Connection Contract. Synergy submits that this is not reasonable within section within section 5.3(a) of the ENAC.

Western Power is already adequately protected if the nominated person does not enter into a Connection Contract because, under clause 6.2(d), in these circumstances Western Power is not obliged to provide the Reference Service.

There may be many reasons why the person nominated as a Controlled does not wish to enter into a Connection Contract. For example, that Western Power insists on unreasonable terms, or on terms not acceptable to the nominated person.

It is not reasonable in these circumstances for there to be an obligation on the User to effectively force the person nominated as a Controller to enter into the Connection Contract. Synergy submits that such an absolute obligation is also not reasonably necessary to protect Western Power's interests, particularly given that there is sufficient incentive, both commercially and practically, for the User to encourage the person nominated as a Controller to enter into a Connection Contract so that the User (and presumably the person nominated as Controller) can use the Reference Service.

Therefore Synergy submits that clause 6.1(e) of the ETAC should be amended as underlined as follows:

> "If Western Power* requires, the User* must use reasonable endeavours to procure that the person nominated by the User* as a Controller* enters into a Connection Contract* with Western Power* in respect of the Connection Point*".

c. ETAC clause 6.2(a) – User not the Controller

Synergy submits that clause 6.2(a) of the ETAC should be amended as underlined as follows:

> "Subject to clause 6.2(b)~~If~~ the User* is not the Controller* of a Connection Point*, and the Controller* of that Connection Point* has not entered into a Connection Contract* with Western Power* in respect of the Connection

Point* then the User* must use reasonable endeavours to ensure that the Controller* of that Connection Point*..."

Synergy submits that the insertion of the words "must use reasonable endeavours" are necessary for the same reasons set out above in relation to clause 6.1(e) of the ETAC.

Synergy submits that a new clause 6.2(b) should be inserted as follows:

"Notwithstanding clause 6.2(a) the User* is not required to:

(i) do anything to determine whether or not the Controller* or its equipment is complying or compliant with the Technical Rules*; or

(ii) commence, maintain or continue legal proceedings:

(A) unless Western Power* provides an indemnity satisfactory to the User*, acting as a Reasonable and Prudent Person*, for all its costs of and relating to such proceedings; or

(B) to the extent that:

(I) the Controller* has obligations to Western Power* arising independently from this Contract*, which, in the circumstances, Western Power*, acting as a Reasonable and Prudent Person*, should enforce; or

(II) Western Power* has rights or powers arising independently from this Contract*, which, in the circumstances, Western Power*, acting as a Reasonable and Prudent Person*, should exercise."

Synergy submits that it is not reasonable to require a User, such as a retailer, to be effectively responsible for its customers' compliance with the Technical Rules or for the technical characteristics of its customers' Facilities and Equipment when, for the reasons set out under heading 3(b) above, Western Power is in a better position to do this. Further Synergy submits it is not reasonable to place an absolute obligation on a User, such as a retailer, to take action, on behalf of Western Power, and in order to protect Western Power's interests, against a retail User's customer, particularly in circumstances when Western Power has the ability to take such action independently of the retail User.

The effect is to allocate the risk of damage to the Network to a party that is not easily able to mitigate or bear such risk, in circumstances where such party is also expected to bear the cost of actions to mitigate the risk. Synergy reiterates its submissions set out under heading 3(b) above in this regard.

Synergy submits that such a provision falls outside the ambit of power contemplated by a *standard access contract* required by section 5.1(b) of the ENAC. Further that such provision is not reasonable within section 5.3(a) of the ENAC.

Finally Synergy submits that such a provision is contrary to the *Code objective*. It is not an economically efficient operation and use of the *network* or *services* of the *network* for the *network operator* to pass risks, which it is best able to mitigate and bear, to parties who have no interest in the risk and who are not best able to bear that risk, nor to mitigate it, let alone bear the cost of mitigation.

9. Tariff – ETAC clause 7.1

Synergy reads clause 7.1 as requiring Western Power to apply a price change on and from the date energy was consumed so that the changed Charges apply only to the period that the energy was transferred and consumed. Synergy submits that clause 7.1 should make it express that Western Power cannot engage in rounding or "pro metering" as appears contemplated in the Price List.

In relation to clause 7.1(f) Synergy refers to its earlier submissions on clause 3.7 under heading 6 above in relation to the interaction between the Metering Database and Schedule 3.

10. Charges – ETAC clause 7.2

Synergy submits that if Western Power is to be permitted to rely upon the information contained in Schedule 3 for the purpose of calculating Tariffs and Charges for Services, then the ETAC should be more detailed in its description of the circumstances in which Western Power can unilaterally update the information in Schedule 3.

Further Synergy submits that if Western Power can unilaterally update information in Schedule 3, there should be an obligation in the ETAC for Western Power to provide advance notice to an affected User of any information to be updated by Western Power. Synergy submits that this is reasonable because, in the past, Western Power has updated the information contained in Schedule 3 due to recognition of past errors or changes to connectivity at a Connection Point (for example zone substation or distance). The effect is that the Charges on a retailer User's customer's bill can change significantly. For example Synergy is aware that Western Power has altered the *standing data* for a User's customer, whose connection was altered from one substation to another, arguably resulting in a requirement to pay $200,000 plus for a change in connectivity that was instigated by Western Power, apparently for the benefit of the Network.

Synergy submits that it is not reasonable to expect, or for the ETAC to effectively require, retail Users to attempt to identify changes to *standing data* after the event or to wade through a reconciliation process daily to identify changes. Synergy submits that clause 7.4(ii) should be amended to the effect that Western Power must notify an affected User before Western Power updates Schedule 3.

11. Charges during Western Power's Force Majeure Event – ETAC clause 7.3

Synergy submits that it is not reasonable for Western Power to charge an affected User for any Service that is unavailable for a consecutive period of 2 days or longer due to a Force Majeure Event where Western Power is the Affected Person. The effect of such a clause is that a User is being forced to pay for a Reference Service that it does not actually receive and cannot utilise. Synergy submits this is inconsistent with the *model standard access contract* (see clauses A3.80, A3.81 and A3.82).

12. Western Power invoices – ETAC clause 8.1

Synergy submits that clause 8.1(c) should be amended as underlined as follows:

> "At the same time as issuing a Tax Invoice* under this clause 8.1, Western Power* must provide to the User* ~~in electronic form~~ electronically* in a CSV* format or such other format acceptable to the User* acting as a Reasonable and Prudent Person*, the metering and billing information used to calculate the Charges* shown on the Tax Invoice* in sufficient detail to enable the User* acting as a Reasonable and Prudent Person* to understand and to verify how Western Power* calculated the Charges*."

A new definition of CSV should be added as follows:

> "CSV* has the meaning given to it the Communication Rules*".

A new definition of Communication Rules should be inserted as follows:

> "Communication Rules* has the same meaning as in the Metering Code*."

Section 5.3(b)(i) of the ENAC requires the ETAC to be sufficiently detailed and complete to form the basis of a commercially workable access contract. Synergy submits that, for the reasons set out below, unless the requirement for Western Power to issue metering information in electronic form is more detailed, then the ETAC does not meet the requirements of section 5.3(b)(i).

There are many ways in which Western Power can provide the detailed metering information. Further the ability of Western Power to change the electronic form in which it provides the information appears to be relatively easy. However the ability of a User to receive and use the information provided in electronic form could be problematic. For example, bulk billed information provided by way of an xml format is not technically or reasonably feasible because the information breaks down. Synergy understands that this is why other jurisdictions have prescribed a CSV format, e.g. Queensland. Please see also the attached submission from NRGEnergy Inc to the Electricity Reliability Council of Texas, which sets out what Synergy considers to be a good summary of the issues of xml versus CSV. The submission can also be found at:

www.ercot.com/content/meetings/cops/keydocs/2007/0814/CSV_XML_Briefing_Document.doc

Synergy submits that the ETAC should require Western Power to provide the information in a standard CSV format, or such other format acceptable to the User, otherwise a User will or may not be able to actually read, understand and use the information provided by Western Power. Synergy submits that it is reasonable that Western Power be required to provide the information in electronic form in a format that is useable by a User otherwise there is no point in Western Power providing the information.

Further Synergy submits that it is not only the metering information that needs to be provided but also the billing information, otherwise a User is not able to understand

and reconcile how Western Power calculated the Charges, particularly in a bulk billing situation.

Synergy also submits that it is reasonable for Western Power to be required to provide sufficient information so the User can understand and verify how Western Power calculated the Charges. Synergy submits that these are matters that one would also reasonably expect to be dealt with in a commercially workable access contract.

13. User invoices – ETAC clause 8.2(c)

Synergy submits that clause 8.2(c) of the ETAC should be amended by inserting the following as underlined:

> "If the User* Disputes the information provided by Western Power* under clause 8.2(a), or if Western Power* does not comply with clause 8.1(c), then...".

Synergy submits that it is not reasonable to prevent a User from disputing an invoice on the basis that Western Power hasn't provided the information required by clause 8.2(a) and that the above suggested addition adequately protects a User while at the same time gives an incentive for Western Power to provide the relevant information in a form that the User can use so that it can understand and verify the Charges. Otherwise there is little incentive for Western Power to "get it right". Synergy also refers to its submissions on clause 8.6 of the ETAC under heading 15 below.

14. Payment of invoices – ETAC clause 8.3

Synergy suggests that a new clause 8.3(c) be inserted as follows:

> "(c) The User's* obligation to pay the Tax Invoice* does not commence until Western Power* has complied with clause 8.1(c) and the Due Date* shall be extended accordingly."

Synergy submits that clause 8.3(a) should be made subject to the new clause 8.3(c) proposed above. Synergy submits that this would be reasonable for the reasons set out above in relation to clause 8.2(c) under heading 13 above.

Synergy submits that there should be a consequential amendment to clause 8.4(a) of the ETAC by adding the words "subject to clause 8.3(c)".

15 Under and overpayments – ETAC clause 8.6

Synergy submits that the additions to clause 8.1 suggested by Synergy under heading 12 above are also necessary given the under and over payment regime established by clause 8.6. The regime effectively places an onus on the User (as well as Western Power) to detect under and over payments.

Further Western Power's proposed addition of clause 8.6(d), which takes away a User's right to recover an overpayment unless the User detects and notifies the overpayment to Western Power within 18 months, makes it particularly reasonable to require Western Power to provide information that is capable of reasonably being

used by the User to understand and verify the calculation of the Charges by Western Power.

16. Western Power and the User must comply with the Technical Rules – ETAC clause 12

For the reasons set out under heading 8(c) above, Synergy submits that clause 12.1 of the ETAC is not reasonable and also does not meet the *Code objective*. Synergy submits that clause 12.1 should be amended as underlined as follows:

> "The User* must comply with the Technical Rules*, subject to any exemptions given to the User* or to any other person that will gain access, or Connect*, to the Network* through a Connection Point* under Chapter 1 of the technical Rules*. (For the sake of clarity, this clause includes a requirement on the User* to, in so far as is reasonably practical, seek to ensure compliance with the Technical Rules* with respect to any other person or person's equipment that will gain access, or Connect*, to the Network* through a Connection Point*. However, nothing in this clause requires a User* to:
>
> (i) do anything to determine whether or not such other person or their equipment is complying or compliant with the Technical Rules*; or
>
> (ii) commence, maintain or continue legal proceedings:
>
> (C) unless Western Power* provides an indemnity satisfactory to the User*, acting as a Reasonable and Prudent Person*, for all its costs of and relating to such proceedings; or
>
> (D) to the extent that:
>
> (I) the other person has obligations to Western Power* arising independently from this Contract*, which, in the circumstances, Western Power*, acting as a Reasonable and Prudent Person*, should enforce; or
>
> (II) Western Power* has rights or powers arising independently from this Contract*, which, in the circumstances, Western Power*, acting as a Reasonable and Prudent Person*, should exercise.)"

17. User to bear costs – ETAC clause 12.2

Synergy submits that clause 12.2(c) should be amended as underlined as follows:

> "Notwithstanding clause 11.(b), where an act or omission of the User* in breach of this Contract* causes Western Power* to incur extra costs in order to ensure Western Power complies with the Technical Rules*, the User* shall bear Western Power's reasonable extra costs so incurred to the extent that such costs are already not repaid by the User* or any other party under any other arrangement, including the Contributions Policy*".

Synergy submits that these amendments are necessary to make the clause reasonable. Synergy submits that it is not reasonable for the clause to contemplate that Western Power can recover these extra costs from a multiplicity of parties. Synergy submits that it is reasonable for the clause to make this clear.

18. Users representations and warranties involved – ETAC clause 17

Synergy submits that it is not reasonable for clause 17(a)(i) of the ETAC to require a User to give a warranty that it has complied with the Application Queuing Policy unless it is technically feasible for a User to comply with such policy. In this respect Synergy cannot give the warranty sought because, for the reasons to be set out in Synergy's submission on the Application Queuing Policy, it is not technically feasible for Synergy to comply with the existing Applications and Queuing Policy. Synergy does not know the position of other Users but would expect that other Users may also have these same difficulties.

In thee circumstances Synergy submits that it is not reasonable to require a regulated contract to impose an obligation to give a warranty that is not reasonably capable of being given or that will be breached as soon as it is given.

19. Limitation of liability – ETAC clause 19.5

Synergy submits that clause 19.5(c) of the ETAC should be deleted. Synergy submits that there is no need to increase the maximum liability amounts by CPI each year because any amounts specified should be sufficient to cover a maximum liability for the *access arrangement period*.

Further, given that a User is required to take out insurances to cover the maximum liability for each item, there is a practical difficulty in having maximum liability amounts increased by CPI each year. Firstly, each User must increase its insurance by the CPI amount each year. Secondly the increase is not likely to be for more than $1 million. In Synergy's experience insurers do not readily deal in increases of less than $1 million and, in many instances do not accept amounts of any less than $5 million.

Synergy submits that where the User has multiple Connection Points, clause 19.5(b) of the ETAC should be deleted and replaced with the following:

> "The maximum liability of both the User* and the Indemnifier* collectively to Western Power* under and in connection with this Contract* is limited to an amount of $60 million in the aggregate, refreshed annually each 1 July, except that the liabilities described in clause 19 are not counted for the purpose of both the User's* and the Indemnifier's* collective maximum liability under this Contract*."

Synergy submits that the amount of $60 million is a reasonable amount for a maximum aggregate liability under a contract of this nature where the User has multiple Connection points. The existing clause would otherwise effectively require all Users to insure the Network, possibly for more that is it worth. For example if clause 19.5 were applied as written then it would require Synergy to take out approximately $8.8 billion worth of insurance. Synergy cannot see how such a requirement is reasonable or meets the *Code objective*.

Further, if the clause is not so amended, and Synergy's submissions in relation to clauses 3.1(c), 6.2(a) and 12 set out in headings 3(b), 8(c) and 16 respectively above are not made, then Users will be forced to take on an uninsurable liability that they cannot easily mitigate. Synergy understands that insurers will not give

insurance to cover a User's liability to Western Power for damage caused by third parties other than the User. Synergy submits that such an outcome is not reasonable within section 5.3(a) of the ENAC.

20. Method of meetings – ETAC clause 29

Synergy requests that clause 29.3(b) be amended to require Western Power to act as a Reasonable and Prudent Person in determining the place where the meeting is to take place.

21. Confidential information – ETAC clause 33

Synergy requests that clause 33.1(f) be amended as underlined as follows:

> "The information is about or relating to a Controller* or a proposed Controller*."

22. Definitions – ETAC Schedule 1

a. Eligibility Criteria

Western Power has inserted a new definition of "Eligibility Criteria". The definition is used in clause 3.3 of the ETAC, which relevantly requires a User to comply with the Eligibility Criteria in relation to each Reference Service to be provided at a Reference Service Point. The effect is to require a retail User to ensure that its customers use only those Reference Services for which they are eligible in accordance with the Eligibility Criteria. Further, when a User's customer's criteria changes such that, under the Eligibility Criteria, the Reference Service applicable to the customer also changes, the User must ensure that the Reference Service for that customer under the ETAC is changed.

Another possible reading of these provisions is that the User must ensure that its customers' relevant circumstances do not change in a way that would result in the customer no longer meet the Eligibility Criteria. Synergy submits that such a reading would not be reasonable within section 5.3(a) of the ENAC because it would effectively enable Western Power to restrict a User's customer's electricity usage, thus not promoting the economically efficient operation and use of the *services* of *networks* and not promoting competition in markets downstream of the *network*.

Synergy understands that the intent of these provisions is for a User to ensure that, when its customer's circumstances change such that the Customer no longer meets the Eligibility Criteria, then the User must, in accordance with the Applications Queuing Policy, change the Reference Service applicable to the customer. If this is the case then Synergy submits that the Applications and Queuing Policy needs to be amended to ensure that the process for moving a customer from one Reference Service to another is smooth and can be done in such a way as to enable a User to comply with the requirements of clause 3.3 of the ETAC. Synergy submits that, at present, the Applications and Queuing Policy does not currently provide for this, for the reasons set out in Synergy's separate submission on the AQP.

Therefore Synergy submits that clause 3.3 of the ETAC should be amended as follows:

"The User, insofar as it is reasonably able to do so, and subject to the Applications and Queuing Policy*, and subject to Western Power* meeting its legal and regulatory obligations in relation to providing Reference Services*, in relation to each Reference Service Point*, comply with the Eligibility Criteria* applicable to the Reference Service* provided, or to be provided, at the Reference Service Point*".

b. Novate

Western Power has inserted a new definition of "Novate" and "Novation". The effect of the definition appears to be to impose restrictions on what constitutes a Novation in a manner that fetters a User's ability to agree with an incoming party the terms and conditions of the Novation; in particular the User cannot contract with the incoming party to provide that the incoming party remains liable for any default by the User in the performance of obligations prior to the effective date of the novation. Synergy submits that such a condition is not reasonable within clause 5.3(a) of the ENAC and is not necessary to protect any business interests of Western Power. Therefore the restriction should be deleted.

23. Schedule 5 Insurances - ETAC

Synergy submits that the word "unlimited" should be deleted from Part 1(a)(i)(A) as such requirement is not reasonable within section 5.3(a) of the ENAC.

Synergy submits that the words "If applicable," should be added to Part 1(a)(ii) and (iii) of schedule 5 because it is not reasonable for the regulated access contract to require that workers compensation and motor vehicle and third party property insurance be taken out in all cases. For example it will not be applicable to retailers.

Synergy submits that Part 1(a)(iv) should have the same corresponding amendments as appears in Part 2(a)(iv), namely the word "or" should be deleted and the word "and" should be inserted after "contractor's plant", the word "contractors" where appearing for the second time should be deleted and replaced with "Users*".

Synergy thanks the Authority for the opportunity to make these submissions.

Please contact me on 6212 1076 if you require any clarification or expansion on any matter in these submissions.

Yours sincerely

SIMON ADAMS
SENIOR LEGAL COUNSEL

CSV versus XML

This paper is to serve as a short briefing document that explicates the concerns that NRG as a market participant has in adopting an XML standard for settlement data over a standard CSV file format. These concerns/issues are listed below, and then each briefly discussed in the paragraphs that follow. It is the intent of this document to make others aware of potentially hidden, unrealized pitfalls that will impact business in a variety of ways if the XML format is adopted over CSV.

1. XML is a very poor choice for large raw numeric data transport & storage.
2. Adopting XML will require additional skill sets whether supported from within the business unit itself, by external contractors, or through existing IT departments.
3. The purchase or creation of additional tools, filters, and reporting mechanisms will be necessary to utilize the XML data in a meaningful way by the end user.
4. The average commercial business user will be significantly impacted by adopting XML over CSV.
5. XML processing creates a large overhead in processor usage.
6. Databases used to store XML are no longer used in the manner for which they were designed.
7. XML should only be employed where it brings a greater ratio of benefit and ease of use over other file formats. It is not a scripting language, nor the proper solution for all data & exchange needs. Hype is not a reason for adoption. The bottom line is what demonstrable advantage can be proven that XML has over CSV.

XML is a very poor choice for large, raw numeric data transport & storage.

One of the largest cons of using XML for large amounts of data transport and storage is the size of the data. XML documents can grow in size from 3 to 20 times the base set of actual data it encapsulates. The reason for this is that each element of data requires a matching pair of description/structure tags.

This size translates into significantly larger storage requirements for the data, both during interim processing, and long term storage. This equates to money spent on additional storage space whether spent on file servers or databases. The increased file sizes also demands additional network bandwidth in the transmission both to and from origin and primary destination as well as data movement within the data owners company as it is copied, shared, utilized on individual workstations, etc.

Adopting XML will require additional skill sets whether supported from within the business unit itself, by external contractors, or by existing IT departments.

Working with and being able to understand, structure, analyze, and sometimes fix XML based documents requires a knowledge set that most business units and IT departments

do not have at all or are possessed in a limited fashion. This means that money and time must be spent on either acquiring those skills through an education/training process or resorting to new hires.

An XML document is merely a text file (like CSV) constructed in a specific hierarchical fashion. It is not a programming language, or an application. By itself, it is text based data. To be used, it must be imported, parsed, verified, manipulated, exported, by additional applications, converters, etc. to be presented and used within normal business functions/settlements. This is especially true if the data has errors, malformed tags, or other issues that prevents the aforementioned application layers from transforming the XML encapsulated data into a usable end state, requiring human intervention. This process is further complicated by the inherent structure of XML.

The purchase or creation of additional tools, filters, and reporting mechanisms will be necessary to utilize the XML data in a meaningful way by the end user.

Even if the proper skill set exists within a company's business unit as well as IT support organization (whether internal or external), the implementation of XML over CSV will demand either the internal creation of, or external purchase of new tools to convert/filter/parse the XML encapsulated data. Most applications currently used for reporting, analysis, graphing, validation, etc. are not natively XML aware, or are difficult to use and NOT designed to handle large XML files as such is likely to encountered with settlement data. In addition, most import/transformation tools that have some form of XML capability, will require the creation of transformation rules, DTD/schema files, etc. to function properly.

The impact of adopting XML over CSV has an even greater impact if currently used tools, reports, and settlement programs have been developed in house. They will require heavy modification, which adds time, money, testing, and the use of personnel time on both the business side as well as IT. In the case of CSV, almost all commercial applications feature support for CSV files. This is also true of in-house applications, since the long established & proven use of the CSV format has inherently driven the inclusion of this capacity into said tools, reports, and applications.

The average commercial business user will be significantly impacted by adopting XML over CSV.

Along the same concerns as stated in the previous paragraph, it should be pointed out that current "staple" applications depended upon and used heavily by business, will either not readily or intuitively work with XML as CSV does. The user will have to be educated in their use, performing import/export transformation tasks, and how to deal with corrupt data. This translates into cost in time, money, and frustration as well as job inefficiency for the average end business user. The CSV data format is and has long been understood by the average end user. It is easily manipulated/employed in terms of importing/exporting, data transformation, repair, and flexibility in multiple application

use, making optimum use of existing tools and end user knowledge and skills to utilize data.

It should be pointed out that ERCOT, when considering the adoption of any idea, protocol, or method that will directly impact market participants, be cognizant of the lowest common denominator in regard to the smaller QSE's infrastructure and financial ability to make sweeping changes to their systems to meet market compliance. ERCOT must be careful not to implement any feature that might impose detrimental costs to smaller market participants, thereby pushing them out of the market by the end design of the systems originally designed to, in theory, help them.

XML creates a large overhead in processor usage.

Another major drawback to the usage of large XML documents is the costs in processor usage and memory requirements. As mentioned prior, XML files can grow to very large sizes. This is problematic in that MOST of the ways in which XML is processed, requires that the entire data set reside in computer memory at once while being verified, parsed, transformed, and exported/mapped for use. This will mean that either additional servers may be required to process the XML, or at the very least memory be increased on current servers to handle the XML data memory requirements. For many infrastructures, servers will already be at or close to maximum memory capacity or not be upgradeable to a level where they would be able to handle the requirements needed for intensive XML processing AND maintain other current running functions and programs.

XML can also be VERY processor intensive throughout the processing cycle. Many current servers CPU capacity will not be able to accommodate these additional loads, dictating either additional hardware purchases, or upgrades as well as the associated licensing & maintenance costs.

For machines that might have the memory and processor capacity, the overhead that this type of processing requires will often slow other concurrent running tasks down considerably, resulting in sluggish performance, impacting other applications being hosted on the same machine.

If transactional data is in the XML format and handled many times throughout the day and cannot wait until "off-hours" processing, the delays and performance hits encountered may well be prohibitive from utilizing current machines and demand dedicated servers for those processes.

Since CSV files do not carry a comparative large bulk size they do not have need of special parsing engines, transformation rules, etc. In fact, there is very little incremental load to most servers or end user machines in handling them for data purposes since the data may be "streamed" in for processing, versus fully loading into memory for processing to occur.

Another impact that needs to be noted is that many functions currently performed on laptops and workstation computers with CSV files, will not be able to be performed with large XML files due to processor and memory requirements generally associated with this type of processing.

Databases used to store XML are no longer used in the manner for which they were designed.

Unless all of the aforementioned transformations and parsing programs and filters are applied to the data to allow its storage into an RDMS system, the XML files are stored as "blobs" or some equivalent for storage.

Using database servers for this purpose turns them into overly expensive file servers instead of data management systems. Additional steps are also generally employed prior to their storage such as "compressing" the files to try and negate the large growth that the XML format has incurred on the data. This adds steps of complexity to extract the data at a later time for database queries, audit purposes, and data verification/edit. This too means programmatic changes, time delays, processing overhead, personnel labor etc. on an ongoing basis.

One of the greatest disadvantages in this scenario is that the data structure resides in and is driven by the XML, not the database itself. XML files present data in a hierarchical tree style fashion, where as databases work with data in a relational manner – a mode which has proven to be far more powerful and easy to manipulate/query than working with XML files themselves.

Finally, if one is going to transform and import the XML data directly into the database itself as relational data to be able to utilize relational queries and commonly available/owned/used RDBMS tools, then the data is being stored twice, in two different manners, to achieve what could be done with a simple import of small CSV files. Note: - CSV files can be made to reflect the relational structure of the database, whereas MOST existing tools cannot efficiently search, relate, and analyze the hierarchal data types as readily.

XML should only be employed where it brings a greater ratio of benefit and ease of use over other file formats. It is not a scripting language, nor the proper solution for all data & exchange needs. Hype is not a reason for adoption. The decision to chose a file format should be based on demonstrable BENEFIT – period. Benefits from cost savings, efficiency, ease of use, flexibility, and maturity should be the final determinants. With all things considered, CSV is a clear choice for settlement data extracts.

Though XML does have its place and use, data formats, just like tools or systems, should be considered on their merit of benefit to cost/ease of use ratio and total ROI. Considering XML for the transport, storage, and manipulation of large amounts of transactional numeric data carries far more cons than pros.

CSV files are a time tested and are a generally implemented solution for data transport and transformation worldwide. Most systems, tools, and users are familiar with this format, and it is efficient in its data storage size requirements, being easily processed allowing for both server and desktop usage of the files.

XML, should not be adopted because of it popularity in "buzz-word" vocabulary or because of technological hype. Business should drive IT decisions, not the other way around. An informed and carefully thought out adoption needs to be made.

XML has many useful functions, and should be applied where it is the appropriate solution, but not implemented when other more effective, easy to use, already understood, and time tested/accepted formats such as CSV offers itself as the right and more expedient format to adopt.

Comments/Questions may be addressed to

Pat.Guy@NRGEnergy.com