



Western Regional Network • <http://westernregional.net> • (505) 277.3486

Western Regional Network (WRN) Policy Committee Meeting

Monday, May 14, 2012

Hilton Seattle Airport & Conference Center
17620 International Blvd.
Seattle, WA United States, 98188
Harbor Room
1 p.m. - 6 p.m. PST

Attendees:

Robert Aylward
Louis Fox
Gil Gonzales
Ron Johnson
Dave Lassner
Marla Meehl
Amy Philipson
Dave Reese

Absent:

Moira Gerety
Steve Smith

1. **Roll Call - Gonzales**
2. **Additions to the Agenda - Gonzales**
 - o Add I2 Program Advisory Group (PAG) representation under I2 section
3. **Meeting Minutes pending approval ([2/9/12](#), [2/27/12](#), [3/16/12](#)) - Meehl**
 - o **RESOLUTION #1**, motion to approve the minutes for [2/9/12](#), [2/27/12](#), [3/16/12](#) as submitted.
 - Ron J. motions
 - Dave R. seconds
 - Motion passes: Yes 8 , 0 No, 0 abstain, 2 absent (Moira Gerety, Steve Smith)
4. **Task List Update - Meehl**
 - o Marla will coordinate a call with NM, Utah, EAGLE-Net (EN), CENIC, and FRGP to look at joint fiber interests
 - o Gil/Dave will pursue new members
 - Texas
 - Northern Wave - becoming reality with Chicago connection
 - o CENIC, Arizona, and UNM should discuss Arizona/New Mexico fiber builds - In-progress
 - Have met twice
 - Hoping to meet 6//8/12
 - o WRN organizational structure
 - Could roll under NLR, LLC
 - Could form new LLC
 - Amy and Jim did look at options
5. **Fund Allocation Review - Reese**

- [Cost model submitted](#)
- Rumors of 100G port charge of \$800K/year
 - Should WRN consider a 100G port?
- Reviewed Maintenance Fund end balance of \$75K
 - Could show replacement for equipment and waves
- Louis and Dave will verify that WRN is a separate account
- I2 wave deal
 - 5 years
 - Transponders last longer than 5 years
 - I2 added maintenance to \$65K/year even though it was supposed to be included in \$65K
 - Ron J. suggests we carry \$65K/year for a total of 8 years to match wave duration
 - Dave thinks I2 made a mistake not including maintenance
- Make Amount Due be equation
- Date spreadsheet
- **RESOLUTION #2**, motion to approve the Annual WRN Expenses [Cost Model 1A](#) dated 5/14/12.
 - Marla M. motions
 - Ron J. seconds
 - Motion passes: Yes 8 , 0 No, 0 abstain, 2 absent (Maira Gerety, Steve Smith)
- **Revised RESOLUTION #2**, motion to approve the revised Annual WRN Expenses [Cost Model 1A \(2\)](#) dated 5/14/12 with formulas and removing Network Member fee for Hawaii.
 - Marla M. motions
 - Ron J. seconds
 - Motion passes: Yes 8 , 0 No, 0 abstain, 2 absent (Maira Gerety, Steve Smith)

6. Membership Update

- Texas LEARN
 - Invitation to LEARN to join WRN last week
 - Call scheduled late May
 - Louis and Gil presenting to LEARN Board in June
 - What are the costs to LEARN
 - What are the costs to WRN
 - Bring \$525K I2 bill so would cost WRN money
 - Could put 100G in Chicago and share with WRN and Chicago
 - Mutual benefit but do not want to assume any LEARN costs
 - Would work to lower total costs
 - Share capacity
 - Offload traffic from national networks
 - General principles of WRN
 - Layer to infrastructure
 - I2 needs to fix their cost model to move to 100G
 - Need to separate Layer 2 pricing/infrastructure from Layer 3 pricing/infrastructure
 - Will work on a vetting presentation deck
- Arizona Schools
 - CENIC met with Arizona (UofA and ASU) and presented an approach to move them closer to being part of WRN
 - Thought had good conversation
 - There have been a number of follow-up financial and engineering questions
 - Questioned transparency of costs
 - Want to stand up their own state network
 - Got some questions about canceling their contract with CENIC
 - Think they will cancel their final year
 - Don't see where WRN fits in
 - Negotiating 2x5s (really 2x10s) from I2 to backhaul to KC and connectivity from Tucson to Phoenix for free
 - Want to be a major player
 - Agreed to remove Arizona from future agendas
- Border Network (AZ, NM, TX)
 - Routes no one wants to pay for
 - Not I2 or NLR
 - Diversity from I10, I25, etc.
 - Meeting June 8 in Phoenix

Discuss EAGLE-Net connection from the north

- Looking at utility fiber and microwave projects

o Others

7. [UNM ARI Update](#) - Change in Scope and Budget Approved. - Gonzales

o ARI CENIC (Seattle-LA)

- CENIC has signed pending UNM signature
- Pending I2 build
 - Have colo orders almost ready
 - I2 has most of the gear on their side
 - Need Ciena transponders to be ordered and delivered by 7/31/12
 - Brocade order has been sent
 - Will be very tight

o ARI LEARN (San Antonio-El Paso)

- Agreement close to signing
- Have signed I2 agreement
- In process of ordering

o ARI CENIC - (Denver-Chicago)

- CENIC ready to order hardware
- I2 agreement not signed - still being negotiated
 - Ron asks if can get Denver to San Jose waves under same T&Cs
 - PNWGP interested in buying a couple 10G waves from WRN Denver to Chicago and would like to complete path from Denver to San Jose
 - Dave does not want to use standard I2 dark channel lease since AUPs cannot be enforced

o ARI UNM

- 10G wave from ABQ to Santa Rosa to El Paso via Carlsbad (alternative to I25 route)

8. Internet2 Discussion - All

o UCAN

- Not much progress or details from last I2 Member Meeting
- Most of the work being done at the state and regional level
- Widely accepted that SEGP funds will flow into UCAN
 - Not clear if SEGP fees will change
- Would have been good to have some national level cheerleading

o CIO Forum/Connector Forum

- CIOs met with Connectors
- CENIC VoIP options
 - CENIC would provide VoIP via I2
 - Build compatible systems
 - CENIC would modify system to I2's
 - Instead I2 released a competing system that is not compatible
 - CENIC moving forward
 - WRN interested in using VoIP service
 - Need to make more coherent between regionals and nationals

o Member Meeting

o Not going to change I2

o Program Advisory Group (PAG)

- Council members will be moved to a PAG
 - [List of PAGs](#)
 - WRN prefers VP NET+ Services or VP Network Services Rob Vietzke
 - Ask Ron Hutchins where he is going
- Amy is on a council
- David on GNC and may stay on something similar
- R&E member on I2 Board

9. NLR Discussion - All

o CBREC - Distribution of 36 transponders

- NLR agreed to 36 transponders for 2012
- CBREC agreed to allocate 4 transponders to each Class B
- CBREC allocated one national channel to all Class B members
- Proposal to use 12 WRN transponders and one channel to increase WRN path by 10G - 20G ring
- **Need to calculate cost of additional transponders and Brocade ports - Ron will produce a proposal**

- Could build WRN openflow network that was proposed
- "Workhorse Network"
 - Could be used for storage
 - NLR national footprint for Class B members
 - Allow VLANs go across WRN infrastructure
 - Not clear how I2 work from SOX overlaps
- 10. **Commodity Pricing - Reese**
 - New Quilt CIS pricing out
 - Dave working to get Level3 pricing down to Quilt levels and still working on full 10G pricing with Level3
 - Netflix peering being shared
 - Nordunet working towards paying zero for transit - looking at partnering with TR/CPS
 - Rethink WRN peering
- 11. **WTC / Network Architecture Update**
 - [Pete's summary](#)
- 12. **Meeting Requirements**
 - Prefer LA
 - 10 - 4pm works best
 - Courtyard Marriott
- 13. **Next meeting**
 - **Tuesday, 10/23/12, LA, 10-4pm**
- 14. **WRN Talking Points/Principles ([ppt](#))**
- 15. **Others... Super Computing @ SLC, GENI Projects, GigU, Ignite, etc.**