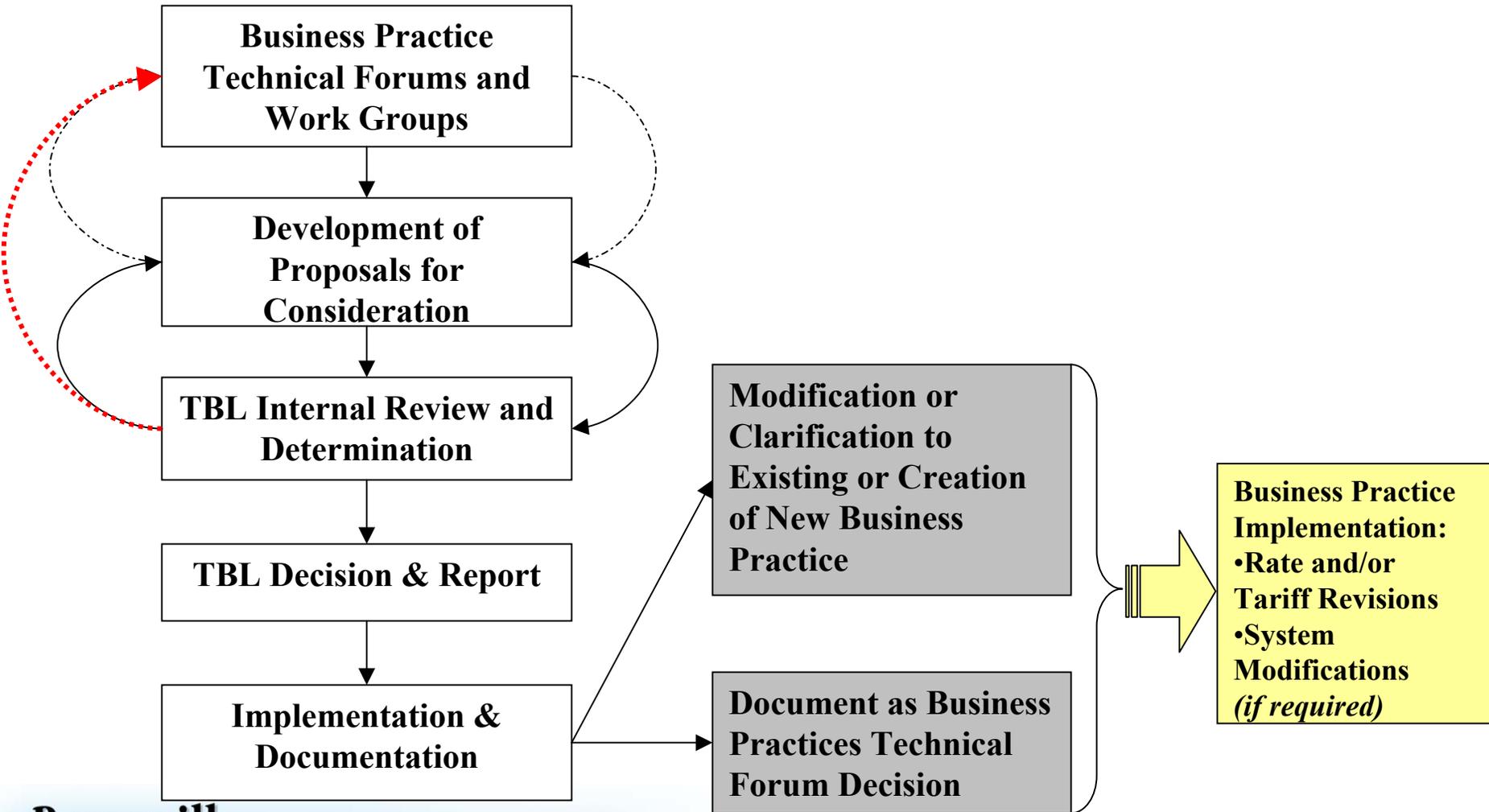


Transmission Business Line
Business Practice
Technical Forum III
APRIL 25, 2003

Agenda

- **Background & Administration**
 - Review of Workflow for Decision Making
 - Review of Resolution/Decision Repository
- **Work Group Reports**
 - Scheduling Practices, Real Power Losses, Operating Reserves, Curtailment, Wind Scheduling
 - Work Group Deliverables
- **TBL Systems Update**
 - Current Projects
 - Short Term Firm Redirects
 - Web Redesign Activities
- **Wrap-up**
 - Next Steps
 - Feedback

Workflow for Decision Making



Documenting Decisions and Resolutions

Business Practices Technical Forum Issues and Resolutions

The Technical Forum has produced the following resolutions to the issues being discussed:

General

Issue	Resolution Date	Resolution
What is the decision/ resolution process for the Business Practice Technical Forum?	02/07/2003	Developed a workflow for decision-making. View details

Operating Reserves

Issue	Decision Date	Resolution
Ability to choose split between spinning and supplemental reserve	02/07/03	This is a big deviation from standard practice. It is too complex to move a recommendation forward at this time.
Selling firm power over non-firm transmission requires operating reserves		This comes under the scope of WECC group working on seams issues

Online at: <http://www2.transmission.bpa.gov/business/techforum/techforum.cfm>

Scheduling Practices Work Group (SPWG) Report Out

Scheduling Practices Work Group Report Out (1-3)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
1) Passive approval of tags and accepted schedule of tag is not accepted by TBL	The sponsor of this issue was not present and the rest of the group did not understand or have that problem.	<ul style="list-style-type: none"> • Monthly customer calls discuss tagging and other scheduling issues. • Customer report cards are sent for each approved/disapproved tag. 	Close issue unless issue sponsor raises it again.	<ul style="list-style-type: none"> • Issue Closed. • Link to scheduling conference calls web site added to Scheduling practices work group web site.
2) Intermediate transfer party included in tag should have say so/deny tag	This issue is not under BPA's purview as it is a NERC policy. The comment will be taken to WECC by TBL to see if a BP can be created for the western systems.	<ul style="list-style-type: none"> • Work this issue in the WECC committee venue. Report back to BP Forum as information becomes available. 	Close issue from the BP Forum.	<ul style="list-style-type: none"> • Issue Pending. • TBL "IS-AS" rep to obtain WECC business practice; link to WECC web site to be added to Scheduling practices work group web site.
3) TBL elimination of "inactive" accounts is a problem	Before an account is deleted TBL will contact the TCH & any entity associated to get approval.	<ul style="list-style-type: none"> • Forum agreed with work group recommendation. 	Document Forum recommendation and present for TBL decision	<ul style="list-style-type: none"> • Issue Closed. • TBL adopted recommendation, BP Forum decision notice prepared.

Scheduling Practices Work Group Report Out (4-6)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
4) OASIS doesn't reflect long-term commitments	TBL did not have enough background to address this topic.	<ul style="list-style-type: none"> TBL indicated they would look into this, balance resource commitments and report back to the group. 	TBL to research implications/ requirements of this issue.	<ul style="list-style-type: none"> ● Issue Pending. ● TBL research initiated.
5) Contract demand limits between TBL and transmission customer	If demand limits were automated in our scheduling system then UIC's would not be prevalent. When a tag is a schedule request this automation will be in place, and would not allow a schedule if there were no transmission. Further work needed.	<ul style="list-style-type: none"> ● Generally, exceeding limits is administrative error vs. intentional. ● TBL <i>current</i> system only says demand has been exceeded, not by how much. ● Demand can currently only be tracked after the fact. 	TBL work group representative will notify TBL systems planners of issue.	<ul style="list-style-type: none"> ● Issue Pending. ● Added to TBL Systems Improvements "parking lot" issues. Need to estimate costs, impacts on resources other systems.
6) Reconciliation process behind billings	Customers recognized TBL's plight & offered their assistance, recognizing that it simply needed to be gone through and completed.	<ul style="list-style-type: none"> ● Customers participation is essential to proper execution of reconciliation process ● TBL plans to add resources to this effort 	Provide periodic updates as to how current reconciliation process is.	<ul style="list-style-type: none"> ● Issue Pending. ● As of April 15, 2003, reconciliations current through December 2002.

Scheduling Practices Work Group Report Out (7-10)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
7) Concern on system changes	A number of issues were discussed; NERC timelines, SW timelines, Seams issues, Buying all transmission on OASIS. Further discussions to take place on these items.	<ul style="list-style-type: none"> Seams issues can cause major problems. 	<p>TBL committed to a presentation of seams issues at next BP forum. Scheduling timelines discussed at monthly conference calls.</p> <p>TBL creating central website for E-Tag issues.</p>	<ul style="list-style-type: none"> Issue Pending. Pending TBL presentation of seams issues Pending TBL completion of e-tag website to facilitate communication of issues.
8) Account building after hours	Customers want 24/7 account building. TBL committed to Sat & Sun account building w/24/7 by October.	<ul style="list-style-type: none"> Forum agreed with work group recommendation 	TBL to advance proposal for expanded work group hours with TBL management	<ul style="list-style-type: none"> Issue Pending (revisit 9/03 to confirm completion). TBL adopted recommendation, BP Forum Notice prepared.
9) Internal constrained paths	John Anasis gave a presentation on the current and possible future constrained paths and how they effect the available transmission	<ul style="list-style-type: none"> “Heads up” from TBL that it is looking at internal constrained paths 	TBL working on automation tools to better track ATC across these paths	<ul style="list-style-type: none"> Issue Closed. (Information only)
10) CASIO supplemental market schedule	This will have to be done with dynamic schedules and there are current postings out on this topic. More discussions will be held.	<ul style="list-style-type: none"> Current postings are out on this topic (dynamic scheduling). 	TBL will post link to dynamic scheduling practice to the scheduling work group website	<ul style="list-style-type: none"> Issue Closed. Dynamic scheduling link added to work group web site.

Scheduling Practices Work Group Report Out (11)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
11) In hour schedule changes for those that self-supply	Moved from ORWG	<ul style="list-style-type: none"> • Move to ORWG 	No action taken yet.	<ul style="list-style-type: none"> • Moved from ORWG.

SPWG Deliverables

- SPWG #1: Closed; link to scheduling conference call information provided.
- SPWG #2: Closed; being addressed in TBL Scheduling Automation forum; link to WECC website provided.
- SPWG #3: Closed; forum decision notice prepared.
- SPWG #8: Closed; forum decision notice prepared.
- SPWG #9: Closed; information provided.
- SPWG #10: Closed; link to Dynamic schedule posting provided.

Real Power Losses Work Group (RPLWG) Report Out

Real Power Losses Work Group Report Out (1-2)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
<p>1) For Transmission Contract Holders of BPA PBL purchases with losses bundled in the price, the ability to have a loss provider other than the PBL for other transmission contracts.</p>	<p>Work group concluded this is not an issue as purchase from PBL allows the customer the choice to take either a “delivered” or a “raw” product. If they choose delivered, the losses are included (bundled) and PBL is the TCH. If they choose “raw”, losses are not included and they have the option as to who is the provider.</p>	<ul style="list-style-type: none"> • The discussion indicated that the work groups definitions for “delivered” and “raw” PBL products were not totally accurate. • The question is if customers with power sales contracts with losses, but that go to the market for other needs, can have entity other than PBL provide these losses. 	<p>Work group to revisit the issue.</p>	<ul style="list-style-type: none"> • Issue Pending • Pending additional work group discussion
<p>2) Concurrent and/or financial losses</p>	<p>A White Paper was put together to further discuss the issues of concurrent losses, and how it would be used for all customers.</p>	<ul style="list-style-type: none"> • Options/change desired is more flexibility for TCH. • Discussion regarding a portfolio concept, with BPA finding the least cost supplier of losses. 	<p>Work group to continue development of the White Paper.</p>	<ul style="list-style-type: none"> • Issue Pending • Pending White Paper development

Real Power Losses Work Group Report Out (3-5)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
3) Frequency customers may change loss providers	Issue #3 and Issue #4 were discussed together and TBL explained the current limitations that the RODS system imposes. The group is recommending more flexibility to the process.	<ul style="list-style-type: none"> This issue included in the White Paper prepared by the work group. Customers realize that additional flexibility will require automation, and that it must wait until TBL's new automation is brought on line. 	Work group to continue development of the White Paper. Document automation needs to add to TBL Systems Improvements "parking lot issues"	<ul style="list-style-type: none"> Issue Pending Pending White Paper development
4) Possibility of designating loss providers by schedule (E-Tag)	This issue discussed together with Issue #3.	<ul style="list-style-type: none"> See Issue #3 	See Issue #3.	<ul style="list-style-type: none"> Issue Pending Pending White Paper development
5) Reconciliation of losses	The group suggested that TBL develop a "due process" to deal with minor issues. TBL will explore the concept and document in a Business Practice.	<ul style="list-style-type: none"> The intent is to develop a procedure to ensure reconciliations are completed in a timely manner. 	TBL to discuss due process idea internally.	<ul style="list-style-type: none"> Issue Pending TBL discussions commencing regarding this option; due process procedure drafted for TBL discussion

RPLWG Deliverables

- RPL Work Group White Paper update
- Continued discussion on all issues required.

Operating Reserves Work Group (ORWG) Report Out

Operating Reserves Work Group Report Out (1-3)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
1) 150 MW floor on self supply	Customer group has been formed to work on proposal. Customers would like this requirement to be less restrictive. Discussion of idea that region should work towards a competitive market for OR. TBL should consider in rate design for next rate period.	<ul style="list-style-type: none"> • The big issue is one of supply. For 150 MW of hydro, the reserve must be 8 MW. There is also compliance issue. • Need to figure out a proposal that TBL is comfortable with, and reserves are still supplied and there is compliance 	Sub-group will develop White Paper for next Work Group meeting	<ul style="list-style-type: none"> • Issue Pending. • Pending development of a White Paper by the small group
2) One supplier per transmission customer	Items 2, 3, & 4 were combined into a single item of additional flexibility to supply OR. Included is the election period (can change more often than annually). The customers have formed a group to work on a proposal. It was noted that those who benefit should cover the cost of implementing changes.	<ul style="list-style-type: none"> • There is already self-supply in some instances, so the first product is to document all the systems and what is required to be able to self-supply. The second product is what is needed to provide more flexibility to suppliers. • Issues must be separated into what can be done now, and what should be done next rate period 	Sub-group will develop White Paper for next Work Group meeting.	<ul style="list-style-type: none"> • Issue Pending. • Pending development of a White Paper by the small group.
3) Allowing generators to self-supply	Combined with 2.	<ul style="list-style-type: none"> • Combined with 2. 	Combined with 2.	<ul style="list-style-type: none"> • Issue Pending • Combined with 2.

Operating Reserves Work Group Report Out (4-6)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
4) Rules for arranging for interruptible exports	Combined with 2.	<ul style="list-style-type: none"> • Combined with 2. 	Combined with 2.	<ul style="list-style-type: none"> • Issue Pending • Combined with 2
5) Ability to choose split between spinning and supplemental reserve	The difference between types of reserves was discussed. TBL explained that current practice is to use spinning reserves first. Allowing only supplemental reserves to be used would require change. Further clarification is needed.	<ul style="list-style-type: none"> • This is the least well-defined issue, but obstacles described are recognized. BPA now uses spinning reserves to meet its total OR requirement, and has not had to call upon supplemental reserves. • Standards say at least 50% must be spinning—assume suppliers follow WECC standards. • There really is no market to buy supplemental reserves. 	Current thought is that this would be a big deviation from standard practice. More analysis is needed before a recommendation can be brought forward.	<ul style="list-style-type: none"> • May combine with 2.
6) In hour schedule changes for those that self-supply	Agreement that this not an issue for this work group.	<ul style="list-style-type: none"> • Issue should be transferred to the Scheduling Practices Work Group 	No further action for the Op Reserves Work Group.	<ul style="list-style-type: none"> • Issue Moved to SPWG

Operating Reserves Work Group Report Out (7-8)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
7) Selling firm power over non-firm transmission requires operating reserves	Agreement that this issue should be deferred to the WECC group working on seams issues.	<ul style="list-style-type: none"> ● Issue not appropriate for this Forum. 	No further action.	<ul style="list-style-type: none"> ● Issue Closed. ● Issue will be handled through established WECC work groups (not BP Forum).
8) For L-shaped schedules/ charges, capture rules in Business Practices	TBL provided a list of generic rules for determining OR charges. These rules were designed to avoid double charging for L-shaped schedules. Customers agreed that this works for most cases, but there are some special cases that are not correct. The customers will provide examples. It was agreed that this was a lower priority than items 1 and 2.	<ul style="list-style-type: none"> ● This has to do with L shaped schedules and firm redirects. There are only one or two esoteric examples. ● L-shaped schedules were questioned as redirects should eliminate need for such schedules. ● When scheduling from one generator to another, operating reserves are not charged. ● There are rules for hubs to cover this. 	Work group is satisfied the bulk of normal scheduling practices work fine. The exceptions will be documented.	<ul style="list-style-type: none"> ● Issue Closed.

ORWG Deliverables

- ORWG#1 – 5: “Flexibility Sub-Group”
White Paper Update
- ORWG #6: Closed; transferred to SPWG.
- ORWG #7: Closed; issue covered in
WECC forum.
- ORWG #8: Closed; work group satisfied
bulk of normal scheduling practices work
fine.

Curtailment Work Group (CWG) Report Out

Curtailment Work Group Report Out (1)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
<p>1) Curtailment in real-time based on reservations vs. schedules</p>	<p>TBL has presented to the work group its current mid-hour curtailment methodology based upon schedules and also presented a possible method based upon reservations. SCL has also submitted an alternate method based on schedules. Some work group participants have indicated a preference for the reservation-based method. One has voiced their preference for the current schedule-based method. TBL has provided the work group with a preliminary estimate of the cost and time required to change over to the reservation-based method. TBL estimates that the change would cost between \$500,000 and \$600,000 and take about 16 weeks to implement. New system implementations only considered after Oct 2003.</p>	<ul style="list-style-type: none"> • This is a narrowly focused group; it's about the methodology we use for mid-hour curtailment. Do we use pro-ration or contract demand? • Seattle City Light's (SCL) version is more refined than TBL's and uses MS Excel. SCL is trying to achieve something they did not see in the models to equitably deal with customers using far less than their contract demand—if the schedule were for less than the contract demand, they would not need to curtail. • There are various methodologies being exchanged with the work group—basic methodology that would replace TBL's mid-hour schedule curtailment. A more clearly defined algorithm is needed for this proposal, if it is advanced. • There will be TBL budget issues with any new methodology proposal. 	<p>The work group will continue discussion of the alternate methodologies, and will report back at the next large Forum meeting.</p>	<p>• Issue Pending.</p>

Curtailment Work Group Report Out (2-3)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
2) Documentation of curtailment procedures (CAISO, TBL) and minimize seams/differences	TBL gave a presentation on its new procedures developed in consultation with the CAISO for mid-hour emergencies involving the AC Intertie or the private NOB portion of the DC Intertie. The procedure relies on the use of counter-schedules between the BPA and CAISO control areas in order to avoid the need for mid-hour schedule cuts. This procedure is posted on BPA's OASIS. TBL hopes to develop similar arrangements with BC Hydro for the Northern Intertie and with LADWP for LA's share of the DC Intertie.	<ul style="list-style-type: none"> • TBL scheduling staff has been working with CAISO to avoid double cutting and the need for mid-hour schedule cuts. So far the procedure has been working well. • The procedure reduces the workload after the fact and smooths out curtailments. • TBL hopes to develop similar arrangements with BC Hydro for the Northern Intertie, and with LADWP for LA's share of the DC Intertie 	None (information only).	<ul style="list-style-type: none"> • Issue Closed
3) Timeline of Business Practices or issues that other entities (WECC, ISAS) are developing	The work group decided to postpone any discussion of this item until a later date. It was felt that there was nothing for the work group to address until WECC's ISAS committee finished their work.	<ul style="list-style-type: none"> • Presently, outside of the scope of this Forum. 	None.	<ul style="list-style-type: none"> • Issue closed (Re-open the issue only if outside discussions cause a need for further review)

Summary of Deliverables:

Curtailment Work Group (CWG)

- CWG #1: Update of alternate mid-hour curtailment methodology.
- CWG #2: Closed; information provided.
- CWG #3: Closed; covered in WECC forum.

Wind Work Group (WWG) Report Out

Wind Work Group Report Out (1-3)

ISSUES	WORK GROUP REPORT & RECOMMENDATIONS	FEB 7, 2003 FORUM DISCUSSION & RECS	STATUS / NEXT STEPS	COMMENTS
1) Wind/intermittent generation scheduling	The work group heard the FPL settlement proposal on a proposed scheduling format. The proposal was debated but there was a lack of unanimity..	<ul style="list-style-type: none"> • Scheduling is the basic issue, but the difficulty is getting beyond the costs to integrate wind resources • FPL energy proposed scheduling format came from CAISO and SMD, not a perfect fit in the Northwest. 	Next work group meeting will focus on the cost of wind integration.	•Issue Pending.
2) Alternatives for scheduling	A better understanding of integration costs is needed to advance the issues.	<ul style="list-style-type: none"> • A better understanding of integration costs is needed to advance the issues. 	Obtain more wind forecast data to develop proposals. Obtain input from TBL on various forecast methods. Develop modified proposal.	•Issue Pending.
3) FERC proposal wind generator tied to forecast schedule and settled monthly aggregated amount	See issue #2.	<ul style="list-style-type: none"> • See issue #2. 	See issue #2.	•Issue Pending

WWG Deliverables

- All issues pending at this time

TBL Systems Update

- TBL Systems Update (Janie Selby)
 - Systems Schedules
 - Organizational Changes
- Short-Term Firm Redirects (Janie Selby)
- Web Redesign Activities (Laurie Perigo)

Transmission Marketing Systems Overview

Janie Selby, Internal Operations Manager

**Philip Mesa, Business Process Implementation
Project Manager**

What is the landscape?

- The rate of changes in the energy and transmission business is increasing tremendously.
- Over the years, BPA has pushed our transmission system to operate at near peak capacity.
- To fulfill our role as a transmission provider, TBL must have business systems that can keep up with the times.

What is the focus for our systems?

- Our focus has been to get our business support systems to a place that will enable TBL to:
 - Meet our mission-critical needs (such as be able to implement changes to our Tariff).
 - Capture any potential revenues that we may currently be leaving “on the table”.

How will we achieve this?

- TBL plans to accomplish our business system objectives by:
 - Being fiscally responsible, looking at the risk/reward for each project.
 - Looking for ways to make our systems “agile” so they can keep up with an ever increasing rate of change.
 - using a holistic integrated (enterprise) systems approach rather than relying on a “piece-meal” (point-to-point) approach.

Where are we today?

- TBL billing system which is online includes the following benefits:
 - Generation of bills takes an average of 4 to 10 seconds versus approx. 15-20 minutes for the Revenue Analyst to generate manually.
 - Generation of complex bills takes an average of 65 seconds versus approx. two weeks by Revenue Analysts in a manual process.
 - Fully automates energy and generation imbalance calculations, minimizing customer imbalance issues.
 - Eliminates manual calculations which reduces billing errors.
 - Enables customers to more readily close their accounting books on billing transactions.

Where are we going?

- Transmission Scheduling Project (E-Tags)
 - Completed the design and development of the new transaction model, based on NERC registered attributes (E-Tags).
 - Moving from rotary account based scheduling to E-Tag based scheduling.
 - Internal User Training is beginning.
 - Ongoing bi-weekly conference calls with customers.
- Next steps:
 - Internal User Acceptance.
 - Workshops with Customers to provide a closer look at the system.
 - Customer Training.

TBL External Web Site

- Phase I – TBL external Web site redesign
 - Completed August 2002
- Phase II – Current redesign & coordination projects
 - Completion Q3 '03
- Phase III – Web Business Strategy
 - Implementation Q4 '03

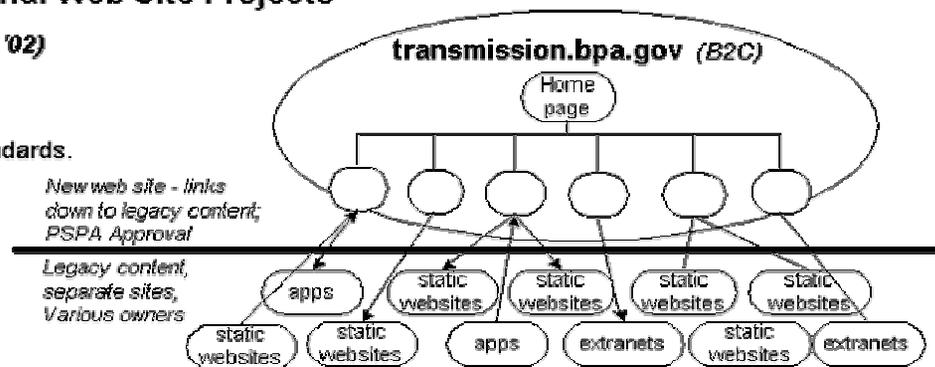
Customer involvement through Phases II & III

TBL External Web Site Projects

Phase I - TBL External Website Redesign (completed in August, '02)

Accomplishments:

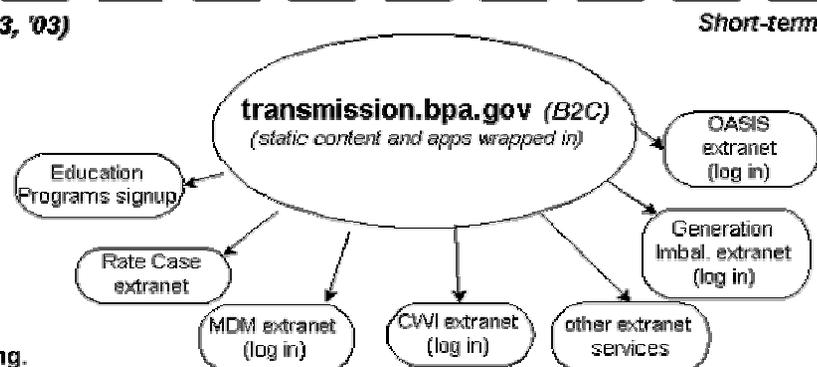
- Repurpose the site to reach a broader range of audiences.
- Create new site look & feel, new Accessibility 508 compliant Web Standards.
- Re-structure of the site to organize it based on audience needs.
- Establish site "ownership" to drive strategy, content development.
- Establish approval processes for top levels of the site.
- Establish (manual) site maintenance and support processes.
- Establish Quality Assurance standards for the site testing, publishing.



Phase II - Current Redesign & Coordination Projects (completion goal Q3, '03)

Goals:

- Incorporate remaining legacy sites/pages into the new design & structure.
- Re-organize information based on customer needs.
- Improve the flow to online service extranet sites, such as OASIS.
- Ensure all external content follows approval & planning processes.
- Improve the way "notices" are processed, managed, and presented.
- Refine and improve the current search engine for better search results.
- New servers for higher security, performance, data integrity, controlled publishing.

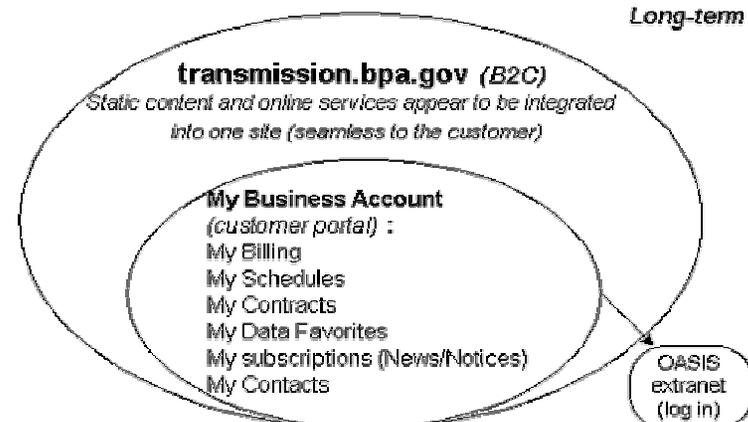


Short-term

Phase III - Web Business Strategy (completion goal Q4, '03)

Goals:

- Outline how strategic use of web can support TBL's Business Objectives.
- Outline Business and Design requirements for integrating delivery of services:
 - Customer account management (personalization/portal technologies).
 - Integrated extranets become seamless site services for the user.
 - Identify/streamline internal processes that deliver services externally.
 - Identify coordination between TBL IT initiatives, people, and systems.
 - Recommended priority & timeline of projects to implement the Strategy.
- Industry-based, consistent web standards for design across TBL external web.
- Complete Site Content Management Plan (people and processes).



Long-term

Bonneville



Power Administration

Transmission

Outline Business Requirements for a content management system project.

TBL Business Practices Technical Forum III

Forum Wrap-up

- Next Steps

- Any proposals on the table?
- Any additional issues to be added?
- Status of Work Groups?
- Forum IV Agenda, Time & Location

- Feedback

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